Introductory Address

TO THE COURSE OF LECTURES ON

MEDICAL JURISPRUDENCE,

Delivered in Session 1878 & 1879, in the Queen's College, Galway,

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GENTLEMEN,—It has been a disputed question whether introductory lectures are of any value. As, however, I think them to be of importance, I will not trouble you with the objections urged against them, but give the reasons why I believe them to be of great utility.

I think it is decidedly desirable, before entering on the consideration of any subject, before discussing the various portions which go to make up the whole, that we should devote a short time to find out what is its real nature, what are its characteristics, and what is its importance. Because it is only by knowing exactly what it is we want to do, what is the general scope of the subject-matter in hand, and by adopting order and method in our investigations, that we shall be able to accomplish our object satisfactorily, and to study our subject rightly, scientifically, and without waste of time. If we do not thoroughly understand what it is we want to learn, but only take up each portion as it comes, or plunge blindly *in medias res*, we are likely to become confused, and not to recognise the relationship which each part bears to the whole. On the other hand, if we comprehend the sum total of the parts which make up that branch of science which we wish to consider or the problem we want to solve, then the comprehension of its component parts becomes easy, and their relationship to the whole and each other clear and intelligible. This is why I think it of great utility that introductory lectures should be given, in order that those who have reached the goal should point out to those on the road the best paths and distinctive landmarks. I give you what may appear a very trivial illustration, but it exemplifies, in a manner familiar to you, the truth of the foregoing observations, and shows how in everything some sort of introductory lecture is needed.

If you invite a tyro to play foot-ball, you take care to tell him that there are certain bounds to the field and a goal at each end, and that the object in view is to drive the ball through the opposite goal against all opposition. This is what he has to do, and by experience and precept he must learn the various rules, manœuvres, and dodges requisite to effect his purpose. But if without giving him this introductory information you had sent him into the midst of the play, the kicking, catching, running, and so forth, would appear objectless and tiresome, and, by his impartial efforts to kick the ball in any way most conducive to his own amusement, I fear he would bring down on his devoted head expletives both loud and forcible.

From this general principle, let us now consider what it is we are assembled here to learn; what are its objects; what is its practical importance; what is its relationship to the science of medicine in general; and what are its peculiar features.

You have entered with the registrar for Medical Jurisprudence. The first question therefore is, What is it? and along with this we must see why it exists. Medical jurisprudence is the relationship of medical knowledge to law; and the necessity for it arises from the state of society in which we live. The more complex and artificial that state, the more intricate will be the medico-legal problems to be solved, because the incentives to crime, and diseased or abnormal conditions, are increased thereby. In savage life wants are few, laws are simple or almost non-existent, and disease is mostly uncomplicated; but as civilisation advances, a more complicated condition of affairs obtains—laws become more numerous and stringent, whilst, on the other hand, the knowledge how to evade them increases, and at the same time diseases and abnormal defects become more extensive, new forms appearing. With the liberty which the law gives to each man to keep what belongs to him, and to accumulate wealth, comes affluence to some, poverty to others; new wants and new desires spring up, and the means of gratifying these desires and wants must be obtained, either from the hoardings of former generations or from the gains of industry and thrift. New habits of thought and new standards of morals also appear. Thus what in the primitive condition was thought right and honourable, or looked at without censure, becomes shameful and wrong in the more cultivated period. Hence we find the incentive to crime. The needy idler wants to enrich himself without honest toil; the man able by hard work to procure only the necessities of life wishes to become quickly rich; the profligate desires to indulge his habits, and yet hide the evidence of his immorality; the sensual man seeks to gratify his lust, the vindictive and brutal to indulge in revenge or violence: but all strive to accomplish their end in such a manner as to evade the clutches of the law and the punishment of their guilt. It thus appears that crime is, as it were, a result of law, because it is a breach of those rules which have been found necessary to protect society; and the more complex the law is, the more varied will crimes be. Moreover, as criminals are not unintelligent, as their great object is to avoid detection, so, as knowledge increases, will also the skill with which offences against the law are committed. With general crimes we, as doctors, have nothing to do. Beyond those of every citizen, our interests are not concerned in pick-pockets, thieves, or swindlers; but when the human body is affected, when criminals seek the aid of branches of our science, then we are bound to give the State the benefit of our skill and knowledge, and thus the department of medical jurisprudence has come into existence, and may be said to be the skilled aid which the physician is bound to give the State, in carrying out the laws framed to protect our lives, our liberties, and our property. Although it may seem paradoxical, our knowledge is often required on behalf of the criminal, to protect him, as it were, against his own act. For as the law requires that there should be a knowledge of the nature and consequence, of the act, or a power of refraining from its commission, to constitute guilt, so we are called on to say whether the accused was capable of knowing what he did, or of controlling the impulses which led him to act; in other words, whether he was sane or insane.

Law may be divided into two great heads, criminal and civil; the former comprising offences in which the Crown prosecutes, in the latter the affected individuals themselves take action. Although our services are principally called for in criminal cases, they are also frequently demanded in civil law. Thus we are often summoned to decide when a will has been made, a deed executed, or contract entered into, if the person was of sound mind, memory, and understanding, or if he was physically capable of carrying out his agreement. Again, in the ordinary transaction of business, the law binds people to respect the lives, interests, and health of others, and if, through carelessness or ignorance, injury be inflicted, the injured party has a right to compensation, and we are called on to testify as to the amount of damage done, and sometimes as to its future consequences. A common example of this is the medical evidence given in railway and other accidents, and with regard to the deleterious effects of various manufactures. These considerations show us that the field of the medical jurist is co-extensive with all the phenomena or occurrences of social life, and naturally raises the question—Is medical jurisprudence a peculiar science? The answer is contradictory—It is and it is not. It is not peculiar in this that the testimony we give is drawn from our knowledge of medical science as a whole; to be a competent medical witness, you require only that knowledge which is essential to your being a good doctor. But it is peculiar in that it is necessary that this knowledge should be applied in a different manner; it is used for a different end; you must also acquire some slight knowledge of law; you must connect cause and effect more closely; you must reason accurately, and you must cultivate a faculty of accurate observation, noting what may appear to you to be trifles, but which may in reality be of extreme importance. Thus, although you ought, for the sake of knowledge, to investigate in all cases the cause of every departure from the normal condition, yet without knowing how it happened you could perfectly well set a broken bone, take up a wounded artery, dress a wound, or treat a concussion of the brain; but to decide whether the

injury was the result of accident, crime, or self-inflicted, much more attention, and more extended observation, will be required. Not only will it be necessary to examine closely the nature, size and shape of the wound, to compare its condition with the date on which it was stated to have occurred, and the instrument with, or the way in which it was alleged to have happened; but every circumstance and all the surroundings of the patient will require investigation, so that you may not only satisfy yourself, but be able to give in your evidence the reasons why you decided that it was or may have been the result of accident or design.

As, then, the evil passions and lawlessness of mankind affect every relationship of life, so will their results affect the entire body, and every branch of your professional knowledge will be called into play. Your knowledge as an expert will, alas, be too frequently required. Immediately on being qualified and commencing to practise, the practical necessity of an acquaintance with the principles of medical jurisprudence may be evidenced; you should therefore devote special attention to its study.

Here the question naturally arises—Should any branch or branches of medical science be more carefully studied or receive more attention than others by the student of medical jurisprudence? I think not. It is generally supposed that its relationship to chemistry and materia medica is more intimate and extensive than to any other branch; but this, I think, is a mistake; and although the chemical tests and reactions used in the detection of poisons ought to be most carefully studied, yet I think I shall show that the generally received opinion as to the preponderating importance of chemistry or toxicology is not a sound one. What are we called on to prove? In cases of death, if it arose from natural causes or violence; by violence I mean any cause which, acting from without, produced death, or originated such morbid conditions that life was cut short thereby. Now the law does not consider the communication of infectious or contagious disease an offence save under peculiar circumstances, yet it is hard to understand why the person who takes away life or injures health by poison or wounds should be considered guilty, and he who poisons by the exhalations of his body innocent; the results are the same, and in both cases preventable. In cases of injury, were they the result of accident or design? and we have to decide on cases of sanity or insanity, malformations, obstetrics, &c. We have to decide the relative amount of original disease and the result of accident; whether a given condition is the normal state, and, if abnormal, whether it was a peculiarity of the individual, or the consequence of idiopathic disease or of violence. Thus you will see that you have to draw on every branch of your science, and it seems to me that the smallest portion, but not the least difficult, will be materia medica and chemical analysis.

Let us glance at the various heads, and see how much the other branches are concerned. Wounds of all sorts are surgical. Pregnancy, abortion, delivery, infanticide, concealment of birth, legitimacy, survivorship, paternity, monsters of doubtful sex, rape, felonious assault, belong to obstetrics. Insanity, suffocation, sudden death from cardiac and cerebral disease, delirium tremens, pulmonary disease, appertain to medicine; whilst the morbid appearances found after death are in the domain of pathology, and the power of recognising a pathological from a normal state of the tissues requires a high knowledge of physiology.

I will now ask your attention to one or two examples which prove the truth of the foregoing observation, and which show how all important it is that you, not only for your own sake, but for that of truth and justice, should, before appearing as medical witnesses, know thoroughly your profession, and how careful you ought to be in utilising that knowledge.

I presume you have all heard something about a *cause célèbre* which is known by the name of the Penge case. A man named Louis Staunton married a woman of feeble intellect for her money, and, after a time, having wearied of her, he contracted an immoral connexion with a relative; and, having arranged with his brother for the support of his wife, he went to live with his paramour. The wife died, and the medical man who saw her the day before she died gave a certificate of death from paralysis; but a rumour of foul play having got about, an inquest was held, and a verdict returned of wilful murder against Louis Staunton, his paramour, and his brother and sister-in-law, for causing Mrs. Staunton's death by starvation. When the case came on for trial the medical evidence for the prosecution upheld the charge of starvation, but, as signs of disease of the membranes of the brain had been found, medical evidence was produced for the defence to prove that the cause of death was tubercular meningitis, it was alleged that the post-mortem examination was incomplete, and that the wasting and emaciation, which were relied on as proof of starvation, had really been produced by the tuberculous condition. Although the jury brought in a verdict of guilty, yet so strongly and extensively was the tubercular theory supported that the sentence of death was commuted into one of imprisonment. Now, this case demonstrated the importance of having a thorough knowledge of the symptoms and pathology of tuberculosis, especially of the acute miliary variety, and of starvation. It also required that the medical evidence should show decisively whether the attenuation was due to want of food or tubercle, and it further demonstrated how vitally necessary it is for the ends of justice that a post-mortem examination should be conducted with the most scrupulous care and exactitude, and every organ should be examined, not merely cursorily, but microscopically. The result of this trial must be looked on as unsatisfactory, but you see that the case was one for the physician and pathologist.

Again, a few years ago the public was startled by what was called the "Whitechapel mystery," in which a man named Wainwright was convicted of the murder of Harriet Lane. Wainwright was apprehended conveying the dismembered remains of a woman through the streets of London. For the prosecution it was stated that the remains were those of Harriet Lane, with whom he had cohabited, and by whom he had had one or more children; that he had murdered her, and afterwards, to conceal his crime, had buried her under the floor of a room in his warehouse; that, having to move to other premises, he cut up the body, and was engaged in transferring it when caught; that the motive for the deed was to get rid of her, probably as too great a drain on his means. Harriet Lane had disappeared about twelve months before the discovery, and was supposed to have gone to France. The cause of death was clear, a gunshot wound of the head being found; but to sustain the charge it was necessary that it should be established (1) that the body found had been dead about twelve months, and (2) that it was that of a woman having had children. The case therefore turned on the condition of the uterus. Was it or was it not nulliparous? If nulliparous, then the case for the Crown fell to the ground, as Harriet Lane was known to have had two children, and there was no one else that it was known it would be an object to the prisoner to remove. This case, then, was one for the obstetrician; whilst the Talbot case, in which the defence urged that death resulted, not from the bullet wound, but from the measures which the surgeon took to try to extract the ball, is an example of a surgical case.

Thus you see that every division furnishes its quota towards medical law; and, further, you will find that, according to locality, the nature of crime will vary. Thus, if your lot be cast in a rural district, especially in this country, you will chiefly be concerned in cases of personal violence; whilst poisoning, and what may be called more refined offences, will, as a rule, be most frequent in cities where scientific knowledge is greater and more widely spread.

Now, having glanced at what forensic medicine is, its causes and relationships, our introduction to it would be incomplete without a word or two as to the duties of a medical witness.

Every citizen is bound by moral laws, by the duty he owes his neighbours and society, as well as by the laws of his country, to aid in the detection and repression of crime, and we as medical men are bound to give our knowledge, and hence the term "skilled witness." But we must not forget that whilst it is our duty to uphold and support the law, we have no less a duty towards the accused, and therefore remember above all that you are a witness. You will read everywhere of conflicting medical evidence, you will hear of judges, counsel, and public commenting in no measured terms on the discrepancies of the doctors. This is partly unavoidable. We find the judges themselves, and counsel, differing as to the meaning of the laws and statutes of the land, framed by men of like understanding with themselves; is it wonderful that men who have to interpret the laws, unwritten and often imperfectly understood, framed by an infinite intelligence, the facts of ever-varying phenomena—is it wonderful, I say, that we, whose intelligence is finite,

should differ as to their interpretations? But, alas! it is too true that this difference, this contradiction, is sometimes due to the medical witness forgetting what is due to truth and justice, to his own self-respect, and to the honour of that noble profession to which he belongs—in a word, forgetting that he is a witness, and allowing his feelings, prejudices, or interests to lead him into that most unbecoming position, a medical advocate. Therefore, gentlemen, I entreat you, if you value your honour, if you have any regard for that of your profession, if you esteem the respect of your *confrères* and of the public, avoid such a position; put prejudice, sympathy, theories, self-interest, aside, and give your evidence on facts alone, and be careful to distinguish clearly between what you state as matter of fact and what you give as a matter of opinion. Do not mistake me, and suppose that I mean to infer that it is customary for members of our profession to wilfully and knowingly give evidence or propound theories to benefit that side of the case in which they are interested. I am proud to say that I know of no body of men who more conscientiously, honestly, and faithfully discharge their duties and fulfil the great trusts placed in them, than doctors do. We have doubtless some black sheep in our ranks, but they are very few in number; I think, however, the results I deplore arise in a great measure from the mistaken notion that as far as possible our evidence ought to be favourable to the side which calls us, and this is greatly strengthened by the customary examination by the solicitor or counsel to see what our evidence is. All this tends to awaken our interest in, and excite our sympathies with, the side which has need of our evidence, and pays us. Now, let us first consider what we are paid for when summoned as witnesses? Is it for your evidence? Certainly not. Even those who would rejoice if you could be induced to give it in their favour would repudiate such an idea. No; you are compensated for your loss of time. The Crown has a right to your time and to your evidence, and may compel you to attend without any compensation whatever; but it allows expenses. You are therefore under no compliment whatever. In civil cases, on the other hand, those who want the benefit of your special knowledge must pay for it. Now recollect that whether the knowledge they obtain from you is advantageous to their case or the reverse, it is still serviceable, as it enables them to avoid shoals and quicksands; and if, knowing as they do that you are bound to tell the truth and the whole truth, they put you forward to give evidence, knowing the weak parts, they must take the consequences. Yours is the duty to tell all you know—extenuate nought, nor set down aught in malice, and you are under no obligation or compliment to either side. I protest against the expression "medical witness for the prosecution," or defence. You are neither one nor the other; and I trust, gentlemen, that you will never dishonour your profession or yourselves by using your knowledge as a weapon to obtain the triumph of wrong over right, or falsehood over truth. Keep to facts, then, in all cases; be strictly impartial; let the judge, jury, and counsel do their own work; by so doing you will preserve your own self-respect, you will uphold the honour of your profession, and your words will have that weight which the fearless, impartial utterance of truth always carries.

So far, then, for the general principles which ought to guide you as a witness. I must now say a few words with regard to particular cases.

In criminal prosecutions there is always a preliminary investigation. If death has occurred suddenly, under suspicious circumstances, or has resulted from injuries inflicted, there will also be a coroner's inquest. At these investigations your evidence will be most frequently required, and you may only get a few hours' notice before you are called on to testify as to the cause of death. You may also be asked to make a post-mortem examination by candle-light, or without having with you the necessary means of investigating the condition of the various organs. Now it often happens that, considering the preliminary investigation unimportant, through ignorance of the course pursued, from carelessness or thoughtlessness, from want of time to weigh and consider the facts of the case, or the appearance seen in the sectio, the evidence of the medical man is given imperfectly, or without due care, believing that it can be perfected before he appears at the assizes. It is, therefore, important that you should know that the evidence you give will be written down, you will be required to sign it, and these depositions, as they are called, will be produced at the assize court, and copies of them furnished to the counsel on both sides. The evidence you give there will be compared with that given before the coroner or magistrate, and any discrepancies will be made use of by the counsel for the prosecution or the defence, and most likely severely commented on by the judge. It is, therefore, apparent that your evidence at these investigations should be considered as carefully and as fully as possible. It will be far better, if the time allowed you has been too short, that you should decidedly say that you are not in a position to state fully your opinion until you have had opportunity for further reflection and consideration, than that you should afterwards be obliged to vary from or amplify the evidence you have given. I need hardly say that, if an adjournment is refused, you must state just what you know, and then you will be justified in altering or amending your statement (if further reflection shows that from insufficient data you have erred), because you can point out that you had asked for time and had been refused.

In giving evidence, confine yourself as far as possible to facts, and when pressed for your opinions or theories, keep them distinct from your facts. It is no part of a medical witness's duty to take upon himself the function of judge, jury, or advocate. Again, give your evidence in plain intelligible English, avoiding terms of art. It may happen that a zealous counsel may conduct the examination unfairly, and try to overthrow your evidence or involve you in contradiction. In such a case it might not be unwise to use the special nomenclature of your science, which will probably be unintelligible to your tormentor and turn the tables against him. But the best defence is to state simple facts, to keep your temper, to answer no question you do not clearly understand, and to see that any quotation made is verified. "Do not let any authority, however eminent, shake you on simple matters of fact."

Finally, a question often arises: Is a medical man justified in refusing to answer a question on the ground that by so doing he would violate professional confidence? The law allows us no such privilege, which it extends to the Church and the Bar; and yet, gentlemen, to us, in the exercise of our profession, are confided secrets no less momentous than the confidence of a client in his counsel, involving frequently the honour of families, the life-long happiness of individuals—no less sacred than the confession of the penitent to his clergyman. These secrets the law tells us we are bound, under penalty of contempt, to divulge in open court. Such a law, in my opinion, is more honoured in the breach than in the observance. I trust that if it ever falls to your lot to decide whether you will obey or not, that you will elect to keep sacred the confidence of your patient, and undergo whatever penalty may attach to your silence, rather than betray the trust which, perchance in a moment of pain or weakness, in the hope of relief from suffering, and in firm belief in your faithfulness and honour, was committed to your keeping.

CASES OF CEREBRAL TUMOUR ILLUSTRATING DIAGNOSIS AND LOCALISATION.

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THE symptoms of cerebral tumours are of two kinds—those due to loss of function of certain parts, and those due to over-action of certain parts. This distinction is clinical, although expressed, as many clinical facts have to be, in pathological language. The pathological distinction of the origin of symptoms differs somewhat from this. Usually the loss of function is due to destruction by the growth, the over-action to irritation by the growth. But in some cases it is almost certain that a loss of function results from an inhibition due to the irritative effect of the growth; while, on the other hand, an over-action may be sometimes the result of the unbalanced action of some part of the brain, the counterpoise of which has been destroyed by the growth.

A clear conception of these facts may assist us in understanding some of the difficulties which attend the diagnosis of cerebral tumour. The typical diagnostic symptoms of

growths in the brain depend on the direct destruction of certain parts, alone or coupled with irritation of adjacent parts. Hence, we have slow paralysis, or loss of sensation, with or without convulsions in, or commencing in, the paralysed parts. When the growth is away from the motor regions, paralysis may not result, and the isolation of the symptoms of irritation may constitute a difficulty in diagnosis. This is illustrated by two of the following cases, in which the irritation caused symptoms closely simulating, in the one case insanity, in the other epilepsy. When paralysis occurs from irritative inhibition it may come on suddenly, and the symptoms of a sudden organic (i.e., a vascular) lesion are simulated.[1] Lastly, the combination of paralysis and irritation may be of such a form as to simulate in a very close manner the symptoms of chronic meningitis.

The ophthalmoscope often affords us very important help in the diagnosis of a cerebral tumour from a vascular lesion (hæmorrhage, softening), from insanity, and from simple epilepsy. In the distinction from chronic meningitis the ophthalmoscope may fail to help us, even although changes in the fundus oculi are present, as in the third case described in this paper.

The following cases are of interest, not only as regards the diagnosis of cerebral tumour, but also in the facts they afford regarding the symptoms of disease in certain regions of the brain, since each was accompanied with certain very well-marked symptoms rarely to be correlated with local disease.

CASE 1. *Epileptoid attacks, mental weakness, and double optic neuritis, afterwards left hemiplegia; glioma of right frontal lobe; hæmorrhage into new growth.*[2]—Martha B——, married, aged thirty-two, was admitted into the National Hospital for the Paralysed and Epileptic on August 26th, 1878; a delicate-looking woman, with family history of phthisis (father and grandfather), none of nervous affection. Marital history suggestive of phthisis; two children born dead (one at the full time, one at seven months), and three died in infancy. Much knocked about by husband, even to unconsciousness; he had lately deserted her. For some three months she had had headache, with attacks of sickness and sudden fainting attacks, the exact character of which could not be ascertained; in one, a fortnight before, she had fallen, and the mouth was said to have been "drawn to the left." For about two months, increasing mental dulness, a vacant look, often restless, getting up in the night. After admission her mental state was very variable; her aspect was dull; she was as a rule restless, turning about in bed, picking imaginary black-beetles off the bedclothes, &c. In the evening she generally imagined she was doing some domestic work. Urine and fæces were passed beneath her, apparently from mental dulness. When spoken to, however, she would often answer quickly and correctly, although usually in few words. Liquids were swallowed readily, but solids were allowed to accumulate in the mouth before swallowing them. When placed on a chair she almost fell off; but she was able, nevertheless, to walk a few steps with an unsteady gait. Both legs seemed equally weak. The arms were weak, the left a little more so than the right. Her tongue deviated slightly to the left, and there was thought to be rather less movement on the left side of the face. No obvious affection of sensation, so far as her mental state would allow of an examination. No affection of ocular muscles. Right pupil acted to light more than the left; in a dim light they were equal. Ophthalmoscopic examination: Well-marked double optic neuritis; area of swelling large; prominence great; tint grey-red, to indirect image almost as red as the fundus; vessels concealed on the surface, the veins forming a large curve as they course down the sides; the arteries narrow; many hæmorrhages. The neuritis was more intense in the right than in the left eye. Vision: right eye, $\frac{1}{3}$; left, $\frac{1}{4}$. No defect ascertainable in fields of vision. During the next fortnight her mental disturbance was very troublesome. At night she would get up and threaten the other patients or remove their bedclothes. She did not do this when observed. It was found also that she could walk much better when no one was looking at her, and one day she was found in the bath-room washing herself. Nevertheless she could not feed herself, but upset the food about her bed. Stools and urine were still passed without her attention.

About the middle of September it was noticed that she would often pass suddenly into a state of coma, from which she could be roused completely, but with difficulty. When lying asleep the eyelids could be raised without waking her. The pupils were first large, and then, under the light, very slowly became smaller, until they were below medium size. When she was fully roused, however, they dilated again. She then complained of severe frontal headache, and became restless, picking the bedclothes. The arms were both moved freely, but the left was evidently weaker than the right, and much less sensitive. The prick of a pin on the right arm made her call out, but on the left arm, or side of the face, she did not seem to feel it. The left cornea could be touched without any reflex action of the orbicularis, which was immediately excited by touching the right cornea. The optic neuritis continued without change. During the next few days coma alternated with extreme restlessness and irritability. When excited she used violent language, and threatened the nurses. After Sept. 19th the coma increased. On the 21st she could be made to open her eyes and stare about, but could not be roused further. The weakness of the left hand had increased to complete paralysis, and it was much colder than the right. She swallowed very little, allowing liquid to remain in her mouth and trickle out again or down the throat. On the 22nd her temperature rose to 101°, on the 23rd to 102°, and on the 26th to 104°, with signs of congestive pneumonia at the bases of the lungs; and from the resulting interference with respiration she died on the 25th. The treatment consisted in first iodide of potassium in full doses, and afterwards sedatives.

Necropsy.—Dura mater adherent to pia mater over anterior part of right superior frontal convolution, and beneath this was a recent extravasation, connected with a clot the size of a walnut, beneath the convolution. Around this was a quantity of grey soft tissue, which at first was thought to be softening, but was evidently, on closer examination, a large soft growth, not separated by any sharp demarcation from the adjacent white substance. The tumour occupied the inner two-thirds of the anterior half of the frontal lobe in the white substance, not involving the grey matter of the convolutions, extending outwards as far as the level of the fissure between the middle and inferior frontal convolution, backwards as far as the anterior extremity of the corpus striatum, but not involving it, and forwards to within an inch of the anterior extremity of the hemisphere. The ascending frontal convolution was altogether behind it. In its upper part the hæmorrhage had occurred, the anterior part was pink-grey in colour and consistent, the posterior part was softer, and somewhat spongy in aspect from paler trabeculæ. The structure and aspect of the tumour were those of a glioma. The right corpus striatum appeared a little larger than the left, but on section was quite healthy. Outside the left corpus striatum, and a little above its level, was another clot, the size of a mulberry. No adjacent growth could be distinguished here; if any existed, it was infiltrated with the clot. In the inner part of the left temporo-sphenoidal lobe, adjacent to, but not involving, the optic tract, was a small superficial area of softening the size of a threepenny-piece. Elsewhere the cerebrum, cerebellum, membranes, and arteries, were healthy.

Remarks.—The symptoms of mental derangement in this case were so predominant and of so well-marked a character that the patient would probably have been sent away to an asylum, had it not been for the existence of well-marked optic neuritis of the considerable degree, and lilac-grey aspect, which are very rarely seen except in conjunction with cerebral tumour.

The history of the patient gave the strongest reason for suspecting constitutional syphilis. A dissolute husband, and two children born dead near the end of pregnancy, constitute together strong presumptive evidence of syphilis, and it is most likely that the woman had had constitutional syphilis. But anti-syphilitic remedies produced no effect, and the tumour was characteristically non-syphilitic in its structure. The case thus illustrates the fact, rare no doubt, but always to be remembered, that simple cerebral tumours are met with in the subjects of constitutional syphilis just as in other persons.

The symptoms of tumour of the anterior part of the frontal lobe have varied much in different recorded cases. The motor paralysis is usually absent when the growth

[1] I have described some cases in which there was a difficulty in diagnosis from this cause in an article in Brain (No. 1, Jan. 1878).

[2] From notes by Mr. E. A. Broster, resident medical officer.

is quite in front of the motor region. Mental symptoms have sometimes been absent entirely; sometimes there has been considerable hebetude, very rarely such distinct derangement as was present in this case. Here, motor weakness was present on the opposite side, in marked degree only towards the last. The insensitiveness in the region of the left fifth nerve is difficult to explain except as an indirect effect of the growth. Possibly the motor weakness may have had the same origin. The small tumour on the opposite side of the brain appeared to have caused no symptoms, except, perhaps, weakness of the right leg.

The initial convulsions may have been due to an early local meningitis, since they were not repeated as the case progressed, as would have been probable had the tumour directly irritated the motor region. There were no signs of more widely spread or recent meningitis to which the mental derangement could be ascribed.

The case also illustrates a possible source of fallacy in the association of optic neuritis with cerebral softening. The existence of a tumour had, during life, from the character of the neuritis, been confidently diagnosed. The post-mortem examination was made in my absence, and I was told that there was no tumour, but a mixture of hæmorrhage and softening. The resemblance to softening was, in a bad light, extremely close; in a good light, however, the peculiar grey gelatinous look of a soft glioma was distinct, and was confirmed by microscopical examination.

(To be concluded.)

ANEURISM OF CAROTID IN LEFT CAVERNOUS SINUS;

LIGATURE OF COMMON CAROTID; DEATH.

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MISS N——, aged forty-five, a lady's maid, unmarried, of delicate appearance, had enjoyed fair health up to the time of coming under observation, with the exception of occasional dyspepsia and rheumatic pains. Catamenia regular. No definite illness in her life. Her father died of bronchitis. Mother died of cancer of womb (?), aged sixty-three. Had three brothers; one was killed accidentally, the other two are living and healthy. Had one sister only, who is still alive and in good health. No aunts, uncles, or other relatives that she could recollect died of aneurism or cancer. The patient had an anxious expression; the capillaries of the face were injected, giving the face a dusky, flushed colour. There was complete ptosis of left eyelid, and slight but decided protrusion of the globe on raising the lid; the whole venous system of the eye was deeply congested, and there was considerable chemosis of the lower oculo-tarsal pouch. The eye was motionless, everted; any attempt at motion produced slight rotation upon the antero-posterior axis, the result of the contraction of the superior oblique. The pupil was moderately contracted, and scarcely influenced by light, but both pupils were the same in this respect. There was, of course, crossed diplopia when the eye was exposed; testing each eye separately V = ½ in both. Examined ophthalmoscopically there was a well-marked "Stannug's papilla"—congestion with œdema. In the right the fundus was normal, unless, perhaps, the veins were somewhat congested. On feeling the eye I could not convince myself of any decided pulsation, but the tension was slightly increased. The external angular vein of the left side was much enlarged and tortuous, and on applying a stethoscope to this region a loud aneurismal murmur was heard; it was also heard very distinctly over the whole of the head, but decidedly loudest over the left temple. This sound, which was distinctly audible to the patient, and distressed her much, was immediately arrested by pressure upon the left carotid; pressure upon the right in no way influenced it. The heart and lungs appeared normal, but there was increased pulsation in both carotids at the root of the neck, and the arteries felt hard and tense, as though they were over-distended. The subjective phenomena of which the patient complained were the noise in the head, considerable pain, giddiness, and feeling of nausea, though she did not actually vomit. She slept badly at night, being troubled with dreams. Pulse 80. Bowels regular. Tongue clean.

History.—About five weeks ago she first noticed a pain in the upper part of the neck on the left side. She had a headache, and the left eye watered and was sensitive to light. She thought she had caught cold. A few days after this, quite suddenly, she was seized with a severe pain at the back of the eye, and she became conscious of some disturbance of vision and drooping of the lid, together with a sound like a steam-engine in the left ear, synchronous with the heart's action. After that period her symptoms had become more marked, and the protrusion, which at first was not obvious, finally became so. Miss N——, at the beginning of her illness, had been seen by Dr. Cocks (of Ross) and a gentleman in Cheltenham, who had diagnosed the case as one of aneurism of the opththalmic artery.

I ordered the patient to bed on a somewhat restricted diet, and put her on fifteen-grain doses of iodide of potassium, intending to have a consultation in the course of a few days.

Jan. 18th.—On visiting her this morning I found she had had a bad night; she complained of increased pain in the head; her face was congested, and the external angular vein more swollen; but, what was more distressing, almost complete ptosis had occurred in the *right* eye, showing that the area influenced by intracranial pressure was increasing. On consultation with Dr. William Murray, it was thought advisable to ligature the carotid without delay; and this was done the following morning. A carbolised silk ligature was employed, and was placed upon the artery above the omo-hyoid muscle at the usual place of ligature. The artery, when exposed, seemed larger than normal, and its coats somewhat too white and thickened. Chloroform was administered; the patient took it well, and there was no vomiting. On tightening the ligature the aneurismal "whiz" became almost inaudible, but not quite so. The patient, on recovering consciousness, expressed herself greatly relieved by the absence of the noise in her head. The faint bruit audible to us was inaudible to her. Her hearing she thought was abnormally acute, and she could distinguish church bells that were ringing at a great distance. She complained of her tongue being sore; it had been held by forceps during the administration of chloroform. Otherwise she was free from pain.—10 P.M.: The patient has passed a comfortable day, and expresses herself satisfied with the result of the operation; protrusion of eye almost completely subsided; venous congestion greatly reduced; ptosis remains in both eyes, but there is more movement in the lids than before. Temperature 98°; pulse 84. To have a grain of morphia if necessary.

20th.—Took a grain of morphia and passed a comfortable night; all the symptoms have partially subsided; she complains still of her tongue feeling sore; has still some little difficulty in swallowing; there is still a very faint murmur audible in the region of the temple.—10 P.M.: Temperature 98°; pulse 84. Has not felt so comfortable during the day; complains of headache and confusion in the head; has considerable difficulty in speaking and swallowing; the nurse says she is very restless; the objective signs are better. On applying the stethoscope to the head, the aneurismal murmur is found to have completely disappeared. To have the morphia again to-night if necessary. Temperature 98·5°; pulse 90.

21st.—This morning there is considerable change in the patient; the nurse describes her condition as being queer; she understands everything that is going on around her, but is quite unable to speak (aphasic). She makes signs for all that she requires, such as food, the chamber-vessel, &c., and occasionally she puts her hand to her head, as though in pain. There seems also considerable difficulty in swallowing. The wound was dressed, and did not look amiss. Ice was ordered to the head, and as the bowels had not acted for a couple of days, a calomel purge was administered. Temperature 98°; pulse 85.

22nd.—Is in much the same state; the bowels have acted freely, and she has taken a fair amount of nourishment; the eye is not now at all protruded, and there is less general congestion of the eyeball, but there is some ecchymosis deep in the superior oculo-tarsal fold. The condition of aphasia is complete, but she retains perfect consciousness, knows and embraces her friends, and makes her wants understood by gestures.

From this date, owing to indisposition, I was unable

personally to superintend my patient, who was kindly taken charge of by Dr. William Murray and Dr. A. Dodd. On Thursday her temperature rose to 104°, and her pulse became much accelerated. The right arm became paralytic on the morning of the 25th. On the evening of the same day the right leg became paralytic, and in this condition she remained until the evening of the 26th, when she became unconscious, and shortly after died. Her relatives would not allow any post-mortem examination to be made.

Remarks.—Although the interest of this case would have been much enhanced by the result of a carefully conducted post-mortem examination, it will still, I think, be considered worthy of a place in medical literature. There are three chief questions of interest in connexion with it:—1. Was this an aneurism? 2. Where was its precise situation, if it were an aneurism? 3. What were the pathological conditions which led to the death of the patient?

The first question is, I think, easily answered in the affirmative. All the most pathognomonic symptoms of aneurism were well developed: the history of the case, the symptoms of intracranial pressure, and, above all, the distinct aneurismal bruit, most loudly audible in the left temple behind the protruded eye, and immediately controlled by pressure upon the left carotid, could leave no doubt as to the diagnosis, which was further confirmed by the subsidence of the ocular protrusion and congestion after the ligature had been applied. The absence of pulsation communicated to the globe, the perfect condition of sight, the patient's own sensation of the deep-seated nature of the mischief, and the noise so distinctly audible in the left ear, pointed rather to the carotid in the cavernous sinus than the ophthalmic as the seat of the disease.

The condition of aphasia, with right-sided hemiplegia, into which the patient passed before death ensued, in every way resembled some of the many cases which have been recorded of embolism of the middle cerebral artery. In this case I have little doubt that death was due to somewhat similar causes. One point in the history of the case after the operation is very significant. During the first two days the patient did extremely well, but a faint murmur was still heard over the seat of the aneurismal tumour. On the night of the second day this murmur ceased, indicating complete arrest of circulation through the sac, and from this time grave cerebral symptoms developed themselves.

A plausible explanation of the development of these symptoms may be drawn from the anatomical disposition of the circulation. After ligature of the carotid the flow of blood to the parts supplied by the anterior and middle cerebral arteries is kept up by the anterior and posterior communicating arteries of the same side. Any interference with the circulation through these would so limit the circulation through the area supplied by the anterior and middle vessels as to interfere with the function and nutrition of the parts they supply. In this case I think it most probable that, owing to extensive coagulation in the aneurismal sac, some clot did obstruct the communicating arteries, that this occurred on the evening of January 20th, and that the graver symptoms resulted from this accidental plugging.

Almost identical symptoms supervened, with like result, in a case of aneurism of the ophthalmic artery operated upon by Mr. Nunneley of Leeds, though at that time the connexion of aphasia with right-sided hemiplegia was not understood. His interesting paper is well worthy of perusal.[1]

Some may be disposed to ask why pressure was not tried in this case. To them I would say that, the patient being extremely nervous and sensitive, it was deemed inadvisable to submit her to the lengthened process which the pressure system necessitates. I did make a slight preliminary trial, but the patient bore it so badly that I was not encouraged to continue. Further, there were certain theoretical considerations which seemed to me to argue in favour of ligature, the chief being the risk of embolism in case of only partial coagulation occurring in the sac after pressure. Again, the patient's symptoms being urgent and necessitating immediate steps being taken, it was thought, if pressure failed, the artery and surrounding tissues would be in a bruised condition, and not so favourable for the application of a ligature. Some cases have been recorded of successful treatment of ophthalmic aneurism by pressure; in these, however, the disease was clearly within the orbit—a position in which any fear of embolism might be disregarded. I am not aware of any aneurism in the cavernous sinus having been successfully treated by pressure; while, on the other hand, the statistics of ligature of the common carotid artery are highly encouraging.

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[1] Medico-Chirurgical Transactions, vol. xiii., p. 175.

NOTES ON UNUSUAL OR RARE FORMS OF SKIN DISEASE.

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I.—CASE OF GUINEA-WORM DISEASE.

ENGLISH practitioners rarely meet with this disease, hence the history of the following case may be interesting and instructive.

The patient, a young lady, was seen by me in consultation with Dr. Deane, of Stoke Newington, on Oct. 5th, 1878. She had returned from India (Hyderabad) about eleven months, and had remained for eight months—that is, till three months before I saw her—in good health.

The first indication of any disorder about her was the development on the outer side of one foot of what seemed to be at the onset a boil, attended by considerable itching. Instead, however, of its suppurating in the usual way, a distinct white blister formed, which was pricked several times, a certain amount of watery fluid escaping. The part around the apparent boil became swollen and somewhat livid in colour. The patient says a doctor took off a piece of "proud flesh," about a month or five weeks since, the size of a shilling, which looked like a piece of "core" (this being probably the dried wall of the bleb), and the sore then began to discharge, water dressing having been used. For a day or two afterwards the foot became very painful, especially at night, and on looking at the foot one morning the patient saw what appeared to be a little piece of white thread or worsted, about half an inch in length, projecting from the centre of the wound, and moving about. This the patient cut off, repeating the like operation, day by day, for six or seven days, the worm protruding a little more each day. At this stage Dr. Deane saw the case, and managed with care to wind the whole worm out in a few days. The patient was able to put her boot on the same day the worm was extracted, although there was a large inflamed spot the size of a shilling from whence the worm came, with considerable surrounding induration, but that soon subsided.

On October 1st an inflammatory blush, some swelling and tenderness, developed themselves in the centre of the sole of the foot, but they shifted their seat in four days to the inner side of the foot, just below the ankle, and, indeed, the condition was like that of a threatening abscess. This was the day I first saw the case. The old wound on the outer side of the foot had practically healed, and it could not be doubted that one worm had been extracted and we had to do with a second. The whole inner side of the foot was painful and swollen, especially over an area of the size of the palm of the hand, involving the region of the ankle and the parts below for some way on to the sole of the foot. At the lowest part of the red infiltrated and painful swelling was a circular livid spot the size of a shilling or more, bounded by a loose edging of cuticle, and the centre of which seemed inclined to point, assuming the aspect of a little *bouton* the size of a split-pea. The leg for a little distance above the ankle was also painful, and we seemed to trace a hard cord running some way from the "pointing" spot in the swelling, upward over the ankle, but this was not very clearly made out. The patient was put upon assafœtida, and told to rest the leg and do nothing locally. Five days afterwards—i.e., on October 10th—the worm had extruded itself to the extent of an inch and a half, and the day afterwards it was found in a poultice which had been applied over-night. It was somehow broken in one place, but had come away entire, and is now in my possession. It measured twenty-three inches and a half in length. After this the

patient did well, and soon got about again in her usual health.

The case is fairly typical as regards the latent period of the disease, which averages about six or seven months. In this case it was eight. It is certainly so as regards the symptoms, but the second worm came away unusually rapidly, which I incline to attribute to the use of the assafœtida, a point insisted upon by Dr. Horton in his work on the subject.

II.—REMARKABLE CASE OF URTICARIA PERSTANS.

R. S——, aged twenty-seven, came to me on the 27th of March, 1871. He stated that he had suffered from gonorrhœa for two years, during which time he had taken much copaiba, which seems to have excited a rash, like urticaria, over the hands and arms and other parts of the body. After convalescence from these troubles the present disease made its appearance.

On stripping the patient and looking at the back, the first thing that catches the eye is a large patch of disease in the sacro-lumbar region, eight inches in length from above down by about five inches at its lower to two at its upper part; the area of the outline of the disease being bag-shaped. The patch is generally slightly raised, of a light-rosy hue, with eight whitish-looking spots, varying in size from that of a shilling to something larger then a five-shilling piece, studding the rosy tinted surface. These whitish-looking places, that at a distance look like huge coarse wheals, *seem* not to be distinctly raised above the level of the adjoining skin, but this may be due to condensation only; they are in no way irritable, nor are they the seat of any disordered sensation. At the extreme circumferential edge of the large patch is a darker-coloured bordering of vessels, more distinctly marked in some places than in others. This patch was connected above with an irregular band two inches broad on an average, and with a white centre, and which reached upwards to the nape of the neck, where it expanded into another and a circular patch, three inches in diameter.

On the *right side* of the body, from the axilla downwards, and between a line drawn on the one hand from the nipple to the pubes, and on the other from the middle of the axilla to the crista ilii, the whole surface was studded over with rosy-red circular blotches, over which the follicles were particularly well seen, and with central parts that seemed to be, but may not have been, slightly depressed, and looking like very pale skin. These pale centres of the rosy patches were quite sensitive, and the seat occasionally of creeping sensations. Offshoots, having the same double characters of pink and white hues with well-defined borders, ran under the right breast. The left side of the body was in much the same state as the right. The disease, however, was not so well marked. At the upper part of the body, in the lateral region, there were three or four circular patches the size of a five-shilling-piece. There was an apparent disposition of the circles in the course of the nerves. At the sternal region on the front of the chest is the original patch. It is now less red than the other spots, and fading. It has a shining, slightly pink hue, and is apparently returning to a healthy state of skin.

On the forehead, from the roots of the hair to about halfway down, the skin is thin, rosy in hue, and looks uneven, but nothing more, though the patient affirms that the "rash" comes out very distinctly when he washes.

The hair is thinning out. The patient is getting pale, very weak, low-spirited, and disinclined to take any exertion. He had been much overworked before the disease made its appearance. There has been, and is, an entire absence of any symptom of syphilis, local or general; the patient has never had that disease to his knowledge. I put him upon cod-liver oil with bark and ammonia, substituting presently for the latter a pill containing quinine, reduced iron, extract of nux vomica, and gentian. At the end of two months the patient had improved in every way, the rash was fading rapidly away, and I subsequently lost sight of the case, but have no doubt he speedily got well, for he was nearly well when I last saw him.

Remarks.—What was the disease? A surgeon had, I believe, seen the case and thought it syphilitic. But really there was no evidence of its being syphilitic. It resembled extensive morphœa alba much, but the changes in the skin were not profound enough for that disease, there was no atrophy at any time, and the progress towards cure was altogether too rapid. The disease was clearly made up of hyperæmia and attendant more or less solid œdema, and it answered to the description of *urticaria perstans* of Willan and Bateman. Many think that the latter is a very chronic form of ordinary urticaria. This is an erroneous conception. It is that form of urticaria characterised principally *in the stationary condition of the wheals*, which remain after the redness at first surrounding them has disappeared. They continue hard and elevated, with occasional itching when the patient is heated, for two or three weeks, and gradually subside, leaving a reddish spot for some days" (Bateman, fifth edition, 1819, p. 94). I have never met with a similar case, and believe it to be a true case of urticaria perstans with exaggerated features. There was no pigmentation in connexion with the disease, and none left behind by it in the place whence the rash had disappeared.

ICTERUS NEONATORUM.

NOTES OF A CASE IN WHICH A CONGENITAL STRICTURE OF THE DUCTUS COMMUNIS CHOLEDOCHUS WAS FOUND ON POST-MORTEM EXAMINATION.

BY JOHN GLAISTER, L.R.C.P. & L.R.C.S. ED.

(Concluded from p. 295.)

BEFORE considering the pathology of this disease, we should note, in passing, its relation to other diseases, and its apparent heredity.

1. *The relationship which icterus bears to umbilical hæmorrhage and purpura.* — In the family history before given it was noted that one of the children affected with jaundice died from umbilical hæmorrhage, and several cases are recorded proving this relationship by West and Sedgwick. The latter gentleman, in his article on "Influence of Age on Hereditary Diseases," cites a case recorded by Mr. Pooley in which a child of a family of six afflicted with jaundice died on the fourteenth day from hæmorrhage from the navel, the remainder having died from jaundice. In the article above mentioned may be found cases showing the relation of these two diseases to purpura, while Dr. Bell's case is also a convenient example. Why umbilical hæmorrhage should take place may depend upon the highly congested liver—the turgidity of its bloodvessels, together with a patency of the umbilical vein, often longer existing in these cases than in normal ones, allowing of a backward flow taking place through that fœtal structure.

The relation to purpura is solved thus: The bile acids, which are mixed in the blood in jaundice from resorption, exercise a solvent action on the blood-corpuscles, and therefore cause a hydræmic condition of that fluid; and acting as an extraneous agent upon the arterioles of the body, through insufficient supply of oxygen, together with an increase of the blood-pressure by reason of contraction of the vessels through irritation, these vessels rupture, giving rise to subcutaneous and submucous hæmorrhages. In Donop's case (*vide ante*) leech-bites bled for a week, resisting all treatment. In Murchison's case the child suffered from epistaxis and extravasations of blood beneath the skin. In Dr. Bell's case the purpura seemed to be the primary cause of death. The increased liability to spontaneous hæmorrhages, and the difficulty experienced in their restraint, whether traumatic or idiopathic, point to an original connexion between this disease and hæmophily or hæmorrhagic diathesis, but it differs in the absence in the former of the characteristic appearances in the mucous membranes and skin obtaining in the latter disease.

In short, we must conclude that there is a triangular relationship between these three diseases—icterus, umbilical hæmorrhage, and purpura—and that in a succession of cases of the first named, one of the other, or both diseases may be ascertained to have been present in some of them.

2. *The hereditary character of the disease.*—Sedgwick, in the article previously mentioned, particularly insists on the hereditary nature of infantile icterus, and cites a case by Mr. Pearson,[1] in which out of a family of eleven nine died within a month of their birth; the tenth lived some years, jaundiced, and died; and the eleventh died on the eleventh

[1] Underwood's Treatise on the Diseases of Children, 10th edit., 1846, pp. 168-9.

day after its birth—all of icterus. (In my case, I made a minute inquiry into the parents' history, *their* parents, and the marital history of their brothers and sisters.) Mrs. A——'s mother had twelve children, all of whom at birth were affected with the "red gum," but none died. There is a tubercular history in her family, two members of which died of "water in the head," one of consumption, and one of white swelling of knee-joint, but no jaundice has appeared in the family of her brother, who alone is married. Mr. A——'s mother also bore twelve children, four of whom are married—himself, two brothers, and a sister. Some of the children of the first brother were affected with jaundice, and one died from it; the family of the second never were, nor were the children of the sister. Further back than this I can trace no history of infantile jaundice. It is interesting to note that the children of Morgagni—fifteen in number—were all affected with icterus about the time of their birth. In the case of Mrs. A——, from the second to the eighth child, there would seem to be a marked heredity in the lesion, and whether something occurred in the individual history of either parent during the time succeeding the birth of the first and preceding that of the second child, I cannot ascertain; neither can I satisfy myself of any syphilitic lesion having at any time existed in either of the parents, nor can I trace any evidence of any such taint in the persons of the children still alive, or in those of the parents themselves. Mr. A—— is very bilious, occasionally betraying a slight tint of jaundice at these times, attended by biliary vomiting and hepatic congestion. Mrs. A—— is always, when pregnant, troubled with bilious vomiting. Perhaps in the family history of the mother or father of such children, something more decided than in this case may be found to account for the disease—for the field of inquiry lies in this direction,—and as a neurosis, *ceteris paribus*, tends to increase in severity and alter in its character as it proceeds through one or two or more generations, it is a fair inference that liver lesions also will.

Pathology.—Rightly to understand the pathology of this disease, it would be well just to glance over the changes which occur in the circulation of the blood in the liver before and after birth. In the seventh edition of "Quain's Anatomy," vol. ii., pp. 880-1, may be found a graphic description of the above changes. Suffice it to say, that after birth the blood-supply is two-thirds less, and that the umbilical vein is for some time then patent. It may also be well to remember that the duct of the liver is formed from a protrusion of the intestinal mucous membrane growing into the blastemic mass of the liver, and that it is originally a solid structure. That these changes which the liver undergoes at the birth of the child are apt to cause an imperfect performance of its duties, is obvious to anyone, and to this cause may be adduced those simple cases of jaundice which pass off, assisted or unassisted, in the course of a few days. But in those cases which go on to the death it behoves us to seek out for a more definite lesion. Mechanical obstruction of the gall-ducts, by reason of something obstructing their calibre, as inspissated bile or mucus; peri-hepatitis, causing complete obliteration of these passages; phlebitis of the umbilical vein with continuation of inflammation liverward; rarely the presence of a gall-stone; arrest in the development of the ducts; spasmodic stricture (?); catarrh; and possibly a peculiar condition brought about by maternal impressions, seem to be the principal causes of fatal infantile icterus. The cases cited previously show that these lesions do bring about fatal icterus, except that brought about by maternal impressions. Binz sees no impossibility in this being a cause, and I can see nothing to prevent such a state of things occurring, since a child may be born with some peculiar abnormality in its person, the only origin for which is that of the mother's having received a fright about the time of conception, or shortly afterwards. And this possibility gains in force when, besides the fact of the mother's greater liability to bilious attacks during pregnancy than at other times, the father is of a distinctly bilious temperament (and by that I mean the temperament of a person who is frequently seized with biliary symptoms), the influence of which upon the product of conception must be felt in a greater or less degree, according to the severity of their symptoms, just in the same way as the different features of a child's face are a reflex so far of the father's or mother's.

The icterus, in all cases of obstruction, is brought about by resorption, and it is generally in these cases that a fatal result may be looked for. The milder forms of this disease, however, seem to have a different mode of production. Dr. Grailly Hewitt thinks[2] these have their origin in hepatic congestion, and reasons that the circulatory changes in the system at birth—impeded circulation in the right heart affecting the liver (atelectasis of the lung or lungs in a comparative degree being the cause of the impediment) and causing hepatic venous congestion, hence jaundice—are to blame for their causation. This interprets, I think, correctly the state of things bringing about the milder forms of the disease, the amount of jaundice being determined by the severity of the congestion.

I have still to mention some supposed causes of icterus, which are relegated to matters in the duodenum.

Baume, in his "Traité de l'Ictère ou Jaunisse des Enfans de Naissance," declares that "this disease is brought about by coagulated milk obstructing the entrance of the bile-duct in the duodenum." This seems very unlikely, as we should expect it more frequently to occur during the milk-taking life of the infant, which, we know, does not happen.

Underwood believes that it arises from the presence of "a viscid matter obstructing the gall-ducts which open into the duodenum." Unless this viscid matter be a result of catarrh of the duodenum and the mouth of the common duct, I do not appreciate his explanation of this lesion. If the supposition be a correct one, other pathological appearances of catarrh would be present, which would indubitably clear up the cause of the disease.

Let me review shortly the cases of Lotze and Waring-Curran. In Lotze's case he thought the lesion due to "some arrest in the hollowing-out of the primitively solid cylinders from which the ducts are developed." One must remark that the lesion was a long time in asserting itself, since for the first three weeks of the child's life only a slight yellowness of the skin manifested itself, and he was only consulted about it when the child had reached the age of three months and a half. One must come to the conclusion either that the liver during that period had been imperfectly performing its function, or else the lesion, afterwards discovered, had increased as the child grew older. It must be remembered, too, that soon after the birth of the child "diarrhœa set in." Might not this have been a result of some irritation of the intestinal tract causing catarrh of the duodenum and bile-duct? This would dovetail into the history; for as the child grew older, and after the occurrence of the diarrhœa, the jaundice increased to a greater extent; while the thickening of the coats of the duct might simulate narrowing of its calibre, and hence the supposed arrest in development. That the ducts are originally solid cylinders no one will be inclined to deny, but I am forced to think, from the severity of the lesion, that the jaundice would have been much more strongly marked at a time more approximate to the birth of the child.

Waring-Curran's case was supposed to have spasmodic stricture, or closure of the common duct, due to the irritation of the bile passing through it. Now the essential producing cause of any spasmodic lesion being the nervous system, we should expect the absence of the nervous element would cause the disappearance of the stricture. The lesion was only found after death, when no nervous element was present, yet he calls it spasmodic. There may have been a spasmodic closure of the duct during life and maintained in that condition by rigor mortis, but that chance is slight. Spasmodic lesions cease after death, since they have the cause of their production in the nervous system. Murchison is inclined to think that if such a lesion does ever exist, it must have worn off long before the development of the jaundice. Again, let us look at his idea of the cause of the lesion—the flow of bile through these delicate structures. He would lead one to infer that the flow of bile was only established after the birth of the child. If so, whence the meconium? That has hitherto been considered a product of the liver—in short, biliary matters mixed with intestinal mucus; and the fact is, that the liver institutes a flow of bile into the intestine long before the birth of the child. So that, even in the event of a spasmodic condition of the bile-duct being present, which I very much incline to doubt, the cause cannot have been the passage of the bile, since it is not foreign to these parts, and since the parts must have been accustomed to its presence prior to the birth of the child.

Peri-hepatitis seems to have been the cause of the malformation of ducts in the other cases recorded. This in-

[2] THE LANCET, vol. ii. 1856, p. 8.

flammatory affection chooses, by preference, the connective tissue embedding the common duct, the portal vein, and hepatic artery, on the concave surface of the liver, as its seat, and hereditary syphilis being a cause of the disease, we might expect to find the cause of the obstruction in this position in a case with such a history. But the question is apt to arise—May this inflammatory condition not be induced by other than syphilitic causes? Is it possible that such a state of things may be due to maternal impressions? In the case whose history I have previously recorded, it was ascertained that the father was of a highly bilious temperament, and that the mother was liable to this condition when pregnant, but was bilious at no other time; there was no history or trace of syphilis, and there was only a slight appearance of inflammation in the connective tissue mass, and that was not evidently recent. Whence the origin of the lesion, then? There was no appearance of inflammatory action round the navel, nor was there any evident phlebitis of the umbilical vein, which was patent at the time of the necropsy. We have at times peculiar unaccountable deformities present in the newly-born, as nævi, webbed fingers and toes, and other still more peculiar abnormalities, which are generally supposed to be the result of an influence transferred from the mother to her offspring, *in utero*, by reason of a fright, or the sight of some similar abnormality. This takes firm hold of the mother's mind, upon which she thinks much, and hopes her child will not be born so deformed, and the consequence is she imprints her exalted mental emotion as a physical deformity upon her child. If a momentary fright, then, succeeded by mental concentration, can bring about such a result, how much more will a physical peculiarity in a father at all times, and in a mother during pregnancy, tend to affect the condition of their offspring. A sextadactylous father will, in all probability, produce a sextadactylous child. Will not a father of bilious temperament, and a mother of similar temperament while carrying a child, influence the condition of the liver and its appendages, functionally and organically, of their offspring? It is quite within the bounds of possibility that such a result should happen, although, in the present case, I will leave it an open question, even in face of the fact of my inability to find any pathological condition sufficient to account for the lesion. Binz presumably admits the possibility of lesions in the liver of the child from the existence of functional derangements of that organ in the parents when he puts the query—whether illness in the mother may not produce peri-hepatitis in the concave surface of the liver of the child? Undoubtedly it is a question of importance in cases of this disease, which, in a series of children, have so fatal a termination, since the answer would influence the treatment applied for the obviation of the disease in the child through the medium of the mother.

From want of adequate space I am compelled to omit treatment of the pathology of the symptoms, and will conclude by a few words on the treatment of the disease.

Many of the cases which greet the eye of the practitioner are of such a slight and compromising character that they spontaneously recover if only patience be exercised; others again are moderately severe in nature, but readily get better under the use of simple purgatives, while others end fatally despite careful treatment. What is then the treatment of an ordinary case? Leave Nature to effect what she can, and if she fail help her by slight purgatives. In a moderately severe case with a child of weakly parts I should be inclined to assist the skin by bringing about perspiration by means of fomentations in which I would envelop the whole body, together with an occasional dose of castor oil; in a strong, vigorous child, I should adopt an early plan of purgative treatment by small doses of calomel, mercury with chalk, and castor oil at short intervals, in addition to fomentations or warm baths, and, perhaps, assist the kidneys by small doses of spirit of juniper, spirit of nitrous ether or succus taraxaci. I should also foment locally. Waring-Curran, adhering to his spasmodic theory of the disease, gives small doses of tincture of belladonna, with the result that "after its administration there is an end of the incessant crying, the child falls asleep, passes bile freely by the bowels, and rapidly recovers its natural state and condition." Graily Hewitt advises the application of a "stimulating liniment rubbed over the whole of the abdomen three times a day by means of flannel," and the administration of one-grain doses of calomel, followed by castor oil occasionally.

In a case in which there is known to be hereditary syphilis existing in the parents, and to have been a fatal issue in previous children from this disease, the treatment would obviously be an anti-syphilitic one through the mother—and that as soon after conception as possible,—in the form of some of the iodine preparations. Binz is of opinion that the treatment should be in this direction, on the presumption that the lesion proceeds from the inflammatory action of the connective-tissue mass on the liver's concave surface, and from the beneficial result known to accrue from this treatment in syphilis. But in a case in which no syphilitic diathesis can be found to exist, and where several children have successively succumbed to this disease, we have to ask ourselves, What is to be done? Possibly a complete change of the hygienic conditions surrounding the mother during her pregnancy, along with the treatment of any complications which may arise during that time, may effect something; and in the event of Mrs. A—— again becoming pregnant I shall advise this course and anxiously await the result.

Glasgow.

INTERMENINGEAL SPINAL HÆMORRHAGE SIMULATING STRYCHNINE-POISONING.

By E. L. DIXON, M.D., M.R.C.P.,
HONORARY MEDICAL OFFICER TO THE PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY.

ON the evening of the 12th December, 1876, I was sent for in haste to see a grocer who had been suddenly taken ill. My patient was a tall and very powerful man of forty-nine years of age, who for the previous eight years, during which he had been under my observation, had enjoyed remarkably good health, having merely suffered from some trifling accidents, and on one occasion from diarrhœa. He had been a farmer up to a year ago, when he had opened a grocer's shop in the town; he was somewhat intemperate, and his accidents had occurred when he was intoxicated; he was of active habits, and was accustomed to lift heavy weights. On this occasion he was taken ill at six in the evening, soon after which I saw him, about half an hour after his "tea." He had been suddenly seized with violent tetanoid convulsions, which continued to recur at short intervals. The body in a paroxysm became completely extended, with the neck, arms, and legs stretched out and stiff for a short time; comparative relaxation then took place, to be followed in two or three minutes by a return of the spasms, during which the patient, who was never unconscious, screamed from the pain which he said he experienced all over the body, but especially in the region of the heart. He asked not to be touched, for movement in any way brought on a return of the paroxysm. When anything was put into his mouth with a spoon, the jaw contracted forcibly upon it, and if swallowing was effected, it was in spasmodic gulps. The pulse, which with difficulty could be made out during a spasm, was in the intervals 74, and of good volume; the pupils during a paroxysm were not insensible, but somewhat sluggish and dilated.

As he was lying upon a stone floor in a back room without any accommodation, during a brief interval from convulsions an attempt was made to remove him to his house. He died, however, before he could be got there. The whole duration of his illness was less than two hours.

As the case presented a very suspicious resemblance to one of strychnine-poisoning, I declined to give a certificate without a post-mortem examination, although in the most careful investigation I could discover no vestige of any inducement to suicide or murder, nor did it seem possible the poison could have been taken accidentally, for his last meal had been of his customary tea and bread-and-butter; moreover, no vermin or other poison was sold in the shop.

With the assistance of two medical friends I examined the body next day, about eleven hours after death. But neither in the head, chest, nor abdomen could we discover any cause for the sudden death; indeed, all the organs seemed fairly healthy. We, therefore, removed the stomach with its contents tied up, and also portions of the viscera. We then turned the body into the prone position, and carefully opened the spinal canal, when we found the arachnoid cavity filled with black and coagulated blood; there was no opening

of aortic aneurism into the canal, and the man had never complained of pain in his back. No attempt was made, on account of the limited time at our disposal, to discover the vessel or vessels ruptured. We considered that the extravasation was amply sufficient to account for his symptoms and death, and that it was unnecessary to proceed to the analysis of the contents of the stomach.

There are several points of resemblance in this case to a case of strychnia-poisoning. 1. The symptoms supervened very suddenly, and within a short time (half an hour) after a meal, in a robust man apparently in perfect health. 2. The convulsions were not attended by loss of consciousness, as in ordinary epilepsy. 3. These convulsions, though certainly clonic, as indeed they are at first after the administration of strychnia, were accompanied with a great amount of rigidity of the limbs, which remained fixedly extended for some time during the height of each paroxysm. 4. There was præcordial or epigastric pain, probably depending upon spasm of the diaphragm, and also spasmodic trismus, which occurs in an early stage of strychnine-poisoning. 5. Though in some cases of strychnine-poisoning the patient asks to be rubbed in order that the cramp be relieved, yet in others the exalted polarity or reflex excitability of the cord manifests itself in the production of the paroxysm by the mere touching of the body, which was a marked feature in this case. 6. The rapidity of death, which occurred within two hours from the beginning of the attack and within two and a half from his last meal. In many cases of poisoning the duration is, however, much less than two hours.

In the various standard treatises on medical jurisprudence I find no mention of spinal apoplexy or spinal hæmorrhage simulating strychnine-poisoning. Epilepsy, hysteria, myelitis, and cerebro-spinal meningitis are briefly alluded to, but tetanus is considered to be the only disease with which the symptoms produced by strychnine are at all likely to be confounded. Tetanus, however, is comparatively chronic, and may, as a general rule, be easily discriminated from strychnine-poisoning except in cases where the poison has been administered in frequently repeated small doses.

In this case the post-mortem clearly showed the cause of death, but I am by no means convinced that rapidly fatal illness might not occur without such marked appearances, and might closely resemble a case of strychnine-poisoning.

Preston.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

UNIVERSITY COLLEGE HOSPITAL.

CASE OF LOCKED TWINS, WITH PROLAPSE OF MEMBRANES OF THE SECOND CHILD.

(Under the care of Dr. J. WILLIAMS.)

FOR the notes of this interesting case we are indebted to Mr. Brian Rigden, M.R.C.S., late obstetric assistant.

Mrs. L——, aged twenty-eight, mother of four children, of whom two are living, sent for assistance on January 13th, 1879, at 9.30 P.M. She stated that she was seven months advanced in pregnancy, and had had labour pains for two hours, and about an hour before sending, during a fit of coughing, the waters had broke, quickly followed by a sensation as if something had fallen down. On examination there was found a tumour, external to the vagina, about as large as a child's head at full time, smooth, dark, almost black in colour, freely movable, with firm tense walls; it evidently contained fluid, and had all the appearance of a tumour containing blood. A catheter passed into the bladder drew off clear urine without having any effect on the size of the swelling. The tumour could be traced to a narrow pedicle, having its origin within the uterus, and it was evidently a portion of the membranes protruding and distended with fluid. In the vagina, behind the swelling, a foot was also felt. The tumour was ruptured and the fluid escaped. Then the foot was drawn down, and the lower part of the body of the child was born. On examination now a second head was felt filling the os uteri, and the case was one of locked twins. With much difficulty the lower blade of Barnes's long forceps was applied to the head of the second child, but the upper blade could not be passed. Using then the body of the first child as an upper blade, gentle traction was employed, and the two children were extracted simultaneously, the heads being considerably flattened laterally. The children were small; the first, a male, was dead, the second, a female, showed some signs of life. They were lodged in separate amniotic sacs, and had distinct placentæ. The mother made a rapid recovery.

The case is interesting, first on account of the locking of the twins, an event which fortunately rarely occurs; and, secondly, because of the prolapse of the membranes of the second child, presenting an appearance at first sight not unlike a large thrombus in the vaginal wall.

SHEFFIELD PUBLIC HOSPITAL.

CASE OF POISONING BY TOBACCO.

(Under the care of Dr. THOMAS.)

FOR the following notes we are indebted to Mr. R. J. Bryden, M.R.C.S., senior assistant house-surgeon.

John B——, aged fourteen, was admitted on Nov. 21st, 1878, at about 5.30 in the afternoon. He was quite insensible; the skin was cold and clammy; the face was very pallid, even to the lips, and some distinct drops of sweat were visible on the forehead. Both pupils were widely and equally dilated, but responded to light. The alæ nasi were widely dilated, respiration was slow and rather laboured, and accompanied by a rattling noise in the throat; the pulse was slow, feeble, and irregular, being about 40 to the minute. The upper extremities were somewhat stiffened, but the legs were completely relaxed; the muscles of the abdomen were contracted; the jaws were firmly fixed, the masseters and other muscles being firmly contracted. On separating the lips, a large quantity of brown frothy mucus dribbled away from between the teeth. About every three or four minutes, there occurred a very convulsive twitching of the muscles on the left side of the face, the eyelids of that side being very much affected. There was very little spasm on the right side of the face. Now and then also convulsive movements of both upper extremities occurred, the right being much more attacked than the left one. The bowels were not moved.

The face and chest were well slapped with a wet towel, and the galvanic battery was applied over the precordial region, but without rousing the boy. The jaws were with difficulty separated with a gag, when about half an ounce of thick, brownish mucus, mixed with a watery matter, was expelled from the mouth. The stomach-pump was used, but very little was drawn off. About an ounce and a half of brandy was then injected into the stomach, after it had been well washed out with warm water. The patient was then taken to bed and placed between blankets, hot-water bottles being applied to the feet. Just before he was taken away to the ward his right arm was violently convulsed, and lifted up towards his mouth. At 7 P.M. he was still insensible. The pulse was 100, temperature nearly normal. The pupils were still dilated, and equal. At 7.45 P.M. he was becoming sensible. A pinch on the skin aroused him. The nurse said that he had been sick, and had made use of the exclamation "Oh dear!" when he vomited. The vomited matter consisted principally of small pieces of undigested meat and vegetables, with but little fluid. The contents were not tested for nicotine, but a small piece of substance was found resembling a piece of tobacco-leaf, but there was no smell of tobacco. At this time pupils were only slightly dilated. Pulse 100; temperature 99·0°; respiration 20. At 8.15 P.M. he was seen by Dr. Thomas. He was sensible and able to speak. He complained of feeling sick, but said he had no pain over his stomach or elsewhere. When asked if he had been smoking or chewing tobacco lately, he strenuously denied either accusation. Milk diet was allowed him, and the effervescing mixture, with the aromatic spirit of ammonia, was ordered to be given every four hours. At 9.30 P.M. he was asleep, and seemed quite composed. He had not been sick again. On the following morning he said he felt quite well, and in the evening of the same day he was discharged. He maintained, after the question had

frequently been put to him, that he had not been smoking or chewing tobacco, and the only account he could give of his illness was that the day before, after eating part of an apple, he had felt ill, and began to vomit.

The following history was obtained from the patient's father. His son worked at a cutler's shop; both he and the mother were very healthy; there were several children besides the patient, but all were quite well; no fits of any kind had ever occurred in the family before. The patient had been a remarkably healthy lad up to the present time, never having been laid up with any illness; he had been taking no medicine of any kind of late. The lad was a great smoker, his mother having found several pipes about him; once or twice he had felt very sick from an overdose of smoking. The father stated that the boy presented himself at home as usual for dinner on the day he was taken ill, when he appeared in good spirits, and looked quite well. He complained of no ailment whatever. It was about 12.45 P.M. when the father saw him. All the family dined together, the meal consisting of broth and bread, the former containing small portions of meat and vegetable. Each member of the family partook of the dish; there was nothing else eaten. Patient went off to his work quite well at 1 P.M., and nothing was heard of him until about 4.45 P.M., when a messenger came to his father, saying that his son had been taken very ill, and was insensible; that when the boy returned to work after dinner he had complained of feeling sick, and on going into the back-yard, had begun to retch and to vomit, bringing up the greater part of his dinner. Immediately after the sickness he seemed to lose the use of his voice, and became senseless, his body seeming to be slightly convulsed at times. As soon as the father saw him, he had him conveyed to the hospital. Neither the father nor any of the boy's fellow-workmen could give any reason for his present condition. The mother of the lad was seen in the evening, and she stated that a boy had told her that he had seen patient chewing some tobacco after his dinner, and she supposed it must have been too strong for him. It was deemed a case of poisoning by tobacco. It has been ascertained that the lad has been quite well since he was discharged, which is nearly two months ago, and seems to be in no way affected by his recent attack of illness.

HÔPITAL MÉNILMONTANT, PARIS.

A CASE OF AMPUTATION OF BOTH LEGS FOR GANGRENE; RECOVERY.

(Under the care of M. DELENS.)

THE following case is interesting from more points than one: firstly, on account of the peculiar history of the patient immediately before the commencement of the accident; secondly, on account of the different causes which may have brought on the gangrene; and, thirdly, from the happy results and rapid recovery of the patient, whose wounds were dressed with lint and camphorated alcohol. This dressing has given the most brilliant results in many other cases where it has been employed in the same hospital for amputation and other wounds.

Auguste W——, a native of Calais, aged thirty-eight years, a barber, entered St. Michel ward on Dec. 23rd, 1878. His family history was excellent, and he himself had always enjoyed good health with the exception of some trifling ailments during childhood. He had never suffered from syphilis, and was of temperate habits. On the 10th of December he set out from Lille with the intention of coming to Paris on foot. On the evening of the first day of his journey he arrived at Douai, after having walked a distance of twenty-eight kilometers. At this time the roads were covered with snow. After having slept the night at Douai he started in the morning for Cambrai, where he arrived at night, having travelled fifty-two kilometers during the course of the day. The next day he walked sixty kilometers, arriving at St. Quentin in the evening. It was in this town that he slept and took refreshments for the last time for three days. After walking for two days and two nights without taking any nourishment and very little rest, he reached Seulis at the close of the day. Overcome by fatigue he threw himself down on the ground at the side of the road and fell asleep in the snow. Next day, when he awoke, he felt that his feet were benumbed, but did not suffer much pain. He was able to continue his journey for another night and a day, and finally arrived at Beauvry, where a charitable person gave him some food, and paid the remainder of his journey on to Paris by train. He had remained three entire days without any food. During the whole time of the journey he wore elastic boots, which he said were rather tight for him. (This is worthy of notice, as it is probable that the constriction determined by the elastics was not altogether foreign to the production of the gangrene by hindering the circulation in the foot.) He arrived in Paris on a Saturday evening, and when going to bed he found the greatest difficulty in taking off his boots, as his feet were considerably swollen. He noticed that they presented rather a purple tint, and were covered with blisters. On the next day the numb sensation was more pronounced, and had extended up the whole length of each leg and thigh. On the following day he was transferred to M. Delens' ward. The distance he traversed on foot may be estimated at about 250 kilometers, and this with hardly any rest and most insufficient nourishment, and with a temperature several degrees below zero.

Upon admission he was a slight man of average height, but very thin. His face wore an expression of suffering and fatigue. The pulse was small but frequent. Temperature was normal. Appetite good. Both feet and the inferior third of each leg had a bluish-black tint, and were cold to the touch. They were perfectly insensible. Upon the upper limit of the abnormal colouring a beginning of the inflammatory circle was to be seen. The limbs gave off very little odour.

On Jan. 8th, as his condition was getting rather worse, it was decided that immediate intervention should be resorted to. The operation was gladly accepted by the patient. Consequently M. Delens amputated both legs slightly under the superior third, with the external flap. A great quantity of reddish-brown liquid escaped upon section of the tissues. The two stumps were dressed with lint dipped in camphorated alcohol, and the patient put to bed. Evening temperature 37·6° C.

Jan. 9th. — Temperature in the morning 38·6°, in the evening 38·8°. The patient felt very comfortable. The dressing was not touched.

11th.—Evening temperature 39·4°. Dressing changed for the first time. Patient felt well and asked for food.

16th.—The temperature had never been higher than 39·4°, and that only once. The wound had been dressed twice during the last five days. Union had taken place to a great extent.

18th.—Morning temperature 36·9°. Drainage-tubes taken away. A small bedsore had formed on the sacrum. General health good.

24th.—All the silver sutures were removed, and cicatrisation was progressing favourably. Bedsore healed.

From this date he continued to improve daily, and on Feb. 10th both wounds were completely healed. The patient will leave in a few days for the country.

During the whole case the patient was kept on a liberal and nutritious diet, accompanied with stimulants.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

THE annual meeting of this Society was held on Saturday, March 1st, 1879. The President, Dr. Charles West, took the chair at 8 P.M., and stated that the ballot for the election of officers and Council for the ensuing year (1879–80) would be open for one hour, nominating Dr. Duka and Mr. Edward Newton as scrutineers.

The balance-sheet of the income and expenditure of the Society for the year 1878, having been already circulated among the fellows, was taken as read, and the honorary secretary, Mr. Timothy Holmes, at once commenced reading the Report of the President and Council. It included the customary details given in these annual summaries. The deaths of fellows were 15, about the average number of the last twenty-five years. The new elections were 23, inclusive of 5 honorary fellows. The total number of fellows, honor-

ary, resident, and non-resident, is 666. The receipts of the year were less than those of 1877 by about £70, due principally to a decrease in the number of new admissions, the other items showing little variation in amount. The ordinary expenditure also was much the same as in recent years, but it had exceeded the year's income by a small amount. The report referred to the printing of the new catalogue and index, which had progressed so far that their completion in the course of the summer was certain. They would form three volumes (two of catalogue of authors and one of index of subjects), with a total of about 2000 pages. The Report of the Croup and Diphtheria Committee was also mentioned, which is now being circulated among the fellows, and the discussion on which will be taken at the meetings of the Society on April 8th and 22nd next. The committee on Dr. Benjamin Howard's Method of Performing Artificial Respiration had not yet made its report. The Council had acceded to the proposal of the "Northumberland and Durham Medical Society to unite with them in memorialising the Government to take such steps as may seem best calculated to prevent the spread of infectious diseases through the agency of public day-schools." The Council recommended to the general meeting the contribution of fifty guineas to the Harvey Tercentenary Fund, and the sale from its funded property of £500 to meet the expenditure on the printing of the catalogue.

At the conclusion of the report, its adoption was moved by Mr. Thomas Bryant, seconded by Mr. John Gay, and carried unanimously, with the exception of the two paragraphs relative to the expenditure of money, for which, according to bye-law, separate motions were required to be made. It was then moved by Dr. Symes Thompson, seconded by Dr. Semple, "that the Society should authorise the trustees to effect a sale from its funded property to the amount of £500, in order to meet the expense of printing the new catalogue and index." A discussion arose, in which Mr. Kiallmark suggested that, in order to meet so large an outlay from the Society's funds, a small payment should be made for the catalogue by the Fellows who wished to possess a copy. Dr. Barclay, Mr. Birkett, and Mr. Holmes joined in the discussion, as to the advisability of such a payment or not, there being no precedent for it in the Society; and it was ultimately referred to the consideration of the new Council. The motion for the sale of stock was carried without a dissentient. It was then moved by Dr. Sieveking (who spoke highly in favour of the adoption of his motion), and seconded by Mr. J. J. Merriman, "that the Society contribute fifty guineas towards the Harvey Tercentenary Fund." Dr. John Harley rose to move an amendment, on the ground that the laws of the Society did not permit such a use of its funds, and that, looking to the deficiency shown in the statement of its accounts, it had not the means in hand to make such a donation. Dr. Black seconded Dr. Harley's motion, but would have preferred moving the previous question. After some remarks by Dr. Quain strongly in favour of the gift, and from Dr. Douglas Powell and Dr. Buzzard as to cases of precedent, &c., the amendment, which proposed that the suggestion of the Council should be deferred for further consideration, was negatived, and the original motion carried with only a few dissentients; several fellows, however, abstaining from giving a vote.

The PRESIDENT then addressed the meeting, introducing some eulogistic remarks on the newly-elected hon. fellows—Sir John Lubbock, Dr. G. Bacelli, Dr. Noel Guneau de Mussy, Professor Scanzoni and Professor Theodor Schwann. He then proceeded to give biographical notices of the fellows whose deaths the Society had to deplore during the past year. His remarks were full of eloquence and feeling allusions to the incidents of their careers, and details of their life's labour and successes. The notices included the names of Mr. Josiah Clarkson of Birmingham, Dr. John Roberts, Mr. Thomas Carr Jackson, Mr. Arthur Noverre, Dr. Julian Evans, Mr. Charles Hunter, Mr. John Hilton, Dr. Robert Willis, Dr. John Ashburner, Dr. Shearman of Rotherham, Dr. Peyton Blakiston, Dr. Koch of Ceylon, and of one of its most celebrated hon. fellows, Professor Carl Rokitansky. It is impossible here to give further details, which will appear in full in the proceedings of the Society. The address was marked not only by great eloquence, but by refined and scholarly language. At its conclusion a vote of thanks was moved in terms of high eulogy by Dr. P. Black, seconded by Mr. Gay, and carried with acclamation.—The President acknowledged the vote in a few words of thanks.

The result of the ballot for officers and Council for 1879–80 was then declared as follows:—President: Mr. Erichsen. Vice-Presidents: Drs. Quain and Radcliffe, Messrs. Holt and Birkett. Treasurers: Dr. Wegg and Mr. Cooper Forster. Secretaries: Dr. Andrew and Mr. Timothy Holmes. Librarians: Dr. George Johnson and Mr. Hulke. Other members of Council: Drs. John Harley, George Roper, Sturges, Symes Thompson, Reginald G. Thompson, and Robert John Spitta, Messrs. Morrant Baker, Howard Hayward, Berkeley Hill, and B. R. Myers.

Votes of thanks were then moved by Dr. Barclay, seconded by Mr. Page, and carried unanimously, to the retiring Vice-Presidents, Dr. W. Wood, Mr. Cooper Forster, and Mr. John Wood, and the other retiring members of Council, Dr. Robert Barnes, Dr. Bigley, and Dr. Handfield Jones; and also, moved by Mr. Berkeley Hill, seconded by Mr. Macnamara, and carried with applause, to Mr. John Birkett for his long and most valuable services to the Society as treasurer, and to Mr. Savory for his valuable services as honorary librarian during the past year.

CLINICAL SOCIETY OF LONDON.

Laparotomy for Acute Intestinal Obstruction, and Removal of Gall-stone impacted in Ileum.—Left Lumbar Colotomy for Cancer of Colon and Rectum.—Hernia of Small Intestine into Rectum.—Tracheotomy in Diphtheria.

THE ordinary meeting of this Society was held on the 28th ult., the President, Dr. Greenhow, in the chair. Cases of intestinal obstruction due to impacted gall-stone, to cancer, and to a very rare form of internal hernia, were read by Messrs. Bryant, Barwell, and Bellamy. Two cases of tracheotomy for membranous laryngitis in diphtheria were read by Mr. Lawson and Mr. Pugin Thornton.

A case of complete removal of a large Rodent Ulcer of the Scalp was shown by Mr. MORRANT BAKER.

Mr. BRYANT read notes of a case of Acute Intestinal Obstruction; Laparotomy; Removal of large Impacted Gall-stone from the Ileum; Death from Peritonitis. The patient was a lady fifty years of age, whom he saw with Mr. R. Barlow, of Dalston, on August 8th, 1878, she having suffered for three days from symptoms of acute intestinal obstruction. Beyond occasional indigestion her previous health had been excellent, and the attack commenced suddenly with vomiting and severe abdominal pain in the middle of the night. Next morning there were symptoms of peritonitis, continued vomiting, which became bilious in character, rejection of all food and medicines, and for five hours before seen by Mr. Bryant the vomiting had become fæcal, whilst no flatus or fæces had passed per anum. There was intense pain, tympanites, but no visible peristalsis. The whole surface was tender, and the chief seat of pain was a little to the left of the umbilicus. The pulse was feeble. There was no external hernia, nor was anything abnormal detected on rectal examination. The diagnosis was acute obstruction, due probably to a band, twist of bowel, or an internal hernia. Mr. Bryant proposed laparotomy, owing to the certainty of a fatal issue if the obstruction were not relieved, although, from the existence of peritonitis and the depressed condition of the patient, the prospects of success were poor. The patient being removed to Guy's Hospital, Mr. Bryant made an incision for about four inches vertically downwards from the umbilicus, and some claret-coloured and ecchymosed coils of intestine appeared at the wound. These were traced up and down until a part was reached where a hard body was found impacted. An incision was made on this, and a gall-stone extracted. The wound in the intestine was sewn up by fine carbolised catgut, and the coils of bowel returned, it being found necessary to puncture them. The patient, however, never rallied, and died eight hours later. At the post-mortem examination the congested intestine was found so greatly distended as to exhibit fissures in the peritoneal coat, as well as numerous patches of ecchymosis. They were matted together by soft lymph. The edges of the wound in the bowel were sealed with new material, and this part, where the gall-stone had been impacted, was about a foot above the ileo-cæcal valve, the bowel beyond

being collapsed. The liver was healthy; but the gall-bladder was replaced by a thick pouch the size of a walnut, to which the hepatic flexure of the colon was adherent. The common bile-duct was natural; but a large fistulous communication, evidently of old date, existed between the duodenum and the gall-bladder. The gall-stone, on being removed, was oval in shape, measuring 1¾ in. in length, 1¼ in. in breadth, and 3¾ in. in circumference, and weighed 238 grains; it had clearly made its way into the duodenum by direct ulceration from the gall-bladder. The patient had never suffered from jaundice, nor any pain of greater severity than could be attributed to indigestion. The symptoms were those of acute intestinal obstruction; but, with these lasting for three days, and faecal vomiting established, the prospects of operation were not good. Mr. Bryant held that in all cases of acute obstruction operative interference should be had recourse to as soon as a diagnosis is made: not a diagnosis of the exact seat or nature of the obstruction, for in trying to arrive at that much valuable time is lost; but a diagnosis of acute obstruction depending on some internal cause. In the present case, where peritonitis was already established, and the bowel had been acutely blocked for seventy-two hours, the operation had failed to save life. In this instance, also, the passage of the gall-stone had inflicted much injury on the walls of the intestine—another argument in favour of the early operation, which Mr. Bryant most urgently advocated in all cases of acute obstruction.

Mr. BARWELL read notes of two cases of Left Lumbar Colotomy. (1) A farm labourer, aged thirty-nine, admitted into Charing-cross Hospital, under the care of Dr. Silver, on November 8th, 1878, with a history of constipation since the previous harvest-time, constipation of increasing degree. He was ruddy and well nourished; his bowels had not acted for nine days, and he had a rolling or twisting pain in the belly, not distinctly localised. Turpentine enemata and stupes were ordered, a pill of opium and belladonna, and later, strychnia and belladonna. On the 20th much flatus and hard fæces had passed; after which a hard irregular mass could be felt in the left groin; this was thought to be either a faecal tumour or else a mass of new growth. Shortly after, the man becoming worse, Mr. Barwell was consulted. He injected eight ounces of water through an O'Beirne's tube, and some feculent matter came away with the injection. He then performed left lumbar colotomy; a large quantity of pent-up fæces escaped, affording much relief; but the patient died from exhaustion the next day. Examination showed incipient general peritonitis, the cause of the obstruction being an annular ulcer of the sigmoid flexure. A few mesocolic glands in the vicinity were enlarged, but there were no distal secondary deposits. (2) A female, fifty-two years of age, admitted on May 11th, 1877, with almost complete obstruction from a cancerous stricture of the rectum. On the 17th, Mr. Barwell performed left lumbar colotomy. A quantity of faecal matter escaped from the wound, and the following day some came away by the natural passage. The progress of the case was satisfactory, save that the cancerous growth in the rectum extended, involving the pelvic organs, and the patient died about five months after the operation. Mr. Barwell attributed the fatal result of the first case to the great depression and exhaustion of the patient prior to the operation. In the second case, the fact that, after giving vent to much of the contents of the colon, some passed down through the rectum proved that excessive pressure from above is one cause of obstruction. He was of opinion that colotomy was an operation which should not be long delayed.

Mr. BELLAMY read notes of a case of rare form of Intestinal Obstruction, due to invagination of the small intestine in the first part of the rectum; Gastrotomy; Recovery. The patient was a pale, delicate woman, aged thirty-four, who came under care on Feb. 16th, 1879, with symptoms of obstruction of nine days' standing. She had an inguinal hernia on the left side, for which she wore a truss, which was left off a short time previously. She was subject to habitual constipation, and on three occasions the retention of faecal matter had given rise to very serious symptoms, which, however, always yielded to ordinary measures. On admission a hard swelling was felt in the left iliac fossa in region of inguinal canal and sigmoid flexure. There was intense pain over lower part of abdomen, and her eructations smelt stercoraceous. On examination of rectum by the entire hand, under chloroform, Mr. Bellamy found that he could not get his fingers past the lower end of the sigmoid flexure, and that it seemed to be filled up and constricted by some intra-abdominal stricture or protrusion through the separated softened muscular fibres of the rectum. Deferring operation for a time, the patient became much worse; vomiting stercoraceous; and on the evening of the 17th Mr. Bellamy proceeded to operate, under strict antiseptic precautions. Thinking there might be some involution of small intestine, perhaps through hernia into rectum, as mentioned by Linhart, or a hernia reduced *en masse*, he cut down on the external ring, exposed it, and, passing the finger into inguinal canal, found no gut there, but felt the sigmoid flexure greatly distended. Then, enlarging the opening, and introducing the entire hand into abdominal cavity, he found the posterior utero-vesical fold of peritoneum greatly developed, and also a bundle of small intestine lying below it and tucked into the anterior wall of the rectum. In addition to this, he felt what appeared to be bands of organised lymph stretching across the first part of rectum, probably due to some earlier inflammation in the same locality rendering reduction per anum impossible. Again, with the entire right hand in the rectum and the left in the pelvic cavity, he broke down adhesions, and, by gradual manipulation, reduced the prolapsed bowel. Very shortly after, flatus escaped, and within twelve hours a most copious evacuation occurred, affording immense relief. The patient progressed favourably until the 22nd, and had not a bad symptom of any sort, but some delirium came on, and she tore off her antiseptic dressings; the delirium was, however, subdued by subcutaneous injection of morphia and by chloral, and at the time of the meeting the wound was looking quite healthy, and she was out of danger.

Mr. HOWARD MARSH regretted that Mr. Bryant's case should have terminated fatally, but had no doubt that the operation would have been more successful could it have been done earlier. Mr. Spencer Wells has recorded two cases in which he has stitched up the bowel wounded during ovariotomy, and with the best results. In one case the gut was divided transversely for three-fourths of its circumference, and Mr. Wells having inserted the adjacent margins of the peritoneal coat, stitched them together. In another case the same operator had stitched up a rent made in the anterior wall of the rectum. In the *London Medical Record* for 1878 there is an account of a case related by Dr. Stuthgard, of Copenhagen, in which a man, to arrest a diarrhœa, thrust a pole into his rectum, so that the gut was torn through, and the rod could be felt in the hypogastric region. The foreign body was removed, the abdomen laid open, and the rent sewn up. The patient recovered. A similar case is given in the same paper. Billroth had recently operated upon a false anus which had formed in the femoral region in a femoral hernia, successfully closing the false anus by bringing the surfaces of the gut together and sewing them up. Such suture of divided bowel promised good results.—Mr. MAUNDER pointed out that the cases were clinically very distinct from each other. As Mr. Bryant had suggested, many physicians and surgeons would have deemed the treatment he pursued as somewhat rash, and he (Mr. Maunder) was personally opposed to abdominal section by reason of the rough handling and exposure to which its contents are, of necessity, very obnoxious, except in rare instances. Nor did he think there was evidence to show that the fatal result was due to three days' obstruction, for an impacted gall-stone was not comparable to an external strangulated hernia when sloughing of the bowel was threatening. He criticised also the use of catgut as a suture for closing the wound in the bowel, fearing that it might yield too soon on the return of peristalsis, and thus give rise to faecal extravasation. Mr. Barwell's cases were common instances of obstruction followed by lumbar colotomy, and required no further comment. He congratulated Mr. Bellamy on the happy progress of his case.—Mr. HOWSE held that a distinction should be made between cases accompanied by extreme distension and those in which internal obstruction was complete but the distension not extreme. In the latter condition the best treatment is undoubtedly to open the abdomen in the median line and seek for the cause of the obstruction; in the former, this operation was very grave, and almost certainly fatal. But in such cases, opening the intestine at the groin, or at the point of greatest distension, would be more likely to be attended with success than gastrotomy proper. Numerous cases could be quoted showing that the intestine may be opened by incision and sown up with fine catgut (as he himself had done), and then returned with safety. Adhesions so very rapidly take place between the serous surfaces that fine catgut may be quite depended on. Speaking of Mr. Barwell's cases, Mr. Howse

said he believed the question would come whether left lumbar colotomy is a justifiable operation when obstruction is due to cancer. It only prolongs the patient's misery. Cases in which the large intestine was constricted by inflammatory products were more favourably treated by colotomy; and he instanced one such case under his care eighteen months ago. He congratulated Mr. Bellamy on the successful result of his case. — The PRESIDENT was strongly of opinion as to the relief afforded by colotomy in cancer of the lower bowel, the operation not only giving relief, but greatly prolonging life. The cases related that night did not throw much light upon the subject of diagnosis, which was of the chief importance to the physician; and his own opinion was that every case of the kind has to be treated on its own merits. It must be remembered that some cases of acute obstruction do get well independently of operative measures, and he referred to one lately under his care, where, the obstruction having been caused by pelvic cellulitis, such unaided recovery took place. —Mr. BRYANT, in reply, was surprised that Mr. Maunder should have objected to the treatment in his case, seeing that there was nothing in the case to show that the cause of obstruction was an impacted gall-stone. He was pleased to hear the President's remark as to the benefit of colotomy in chronic obstruction, for he had no doubt of its being a means of great relief and comfort; and he had not yet met with a single patient who regretted that the operation had been done. He did not quite understand the condition occurring in Mr. Bellamy's case.—Mr. BARWELL fully concurred in the opinion of the great comfort derived by colotomy in rectal cancer. He related a case of a gentleman who came to him for hæmorrhoids, having a year previously suffered from jaundice and severe abdominal pain. He suffered much from constipation, which was unrelieved by enemata. On examination Mr. Barwell detected a hard mass in the rectum, and, extracting this by means of a spoon, found it to be a large biliary calculus. Its extraction was followed by an enormous discharge of fæces. Mr. Barwell supposed this had escaped into the colon by direct ulceration from the bile-duct the year before.—Dr. SILVER said that in the first case, related by Mr. Barwell, the chief point raised was as to the nature of the tumour in the groin. Its malignant character was at first doubted, from the age of the patient and his very healthy appearance; whilst the view that it was due—in part at least—to fæcal impaction was borne out by its partial subsidence after enemata had been given. He believed that the great distension of the abdomen displacing the thoracic viscera had much to do with the fatal result.—Mr. BELLAMY said he was unable to explain how in his case the hernia took place into the rectum. It would seem as if the anterior wall of the rectum had yielded, and the small intestine, passing beneath the meso-rectum, had protruded into the large bowel. This explanation was that given by Linhart in the only similar case on record Mr. Bellamy had found.

Mr. G. LAWSON read notes of a case of Tracheotomy in the last stage of Diphtheria. The patient was a girl eight years of age, attacked with diphtheria on May 17th, 1878, her sister having been taken ill a few days before. There was some hoarseness of voice on the 18th; on the 20th slight difficulty of breathing; on the 21st the sister died with laryngeal symptoms. On the 22nd Mr. Lawson saw the second child with Mr. Morton and Dr. Dobell. Its breathing was then loud and stridulous, face and extremities livid. Mr. Lawson performed the high operation of tracheotomy forthwith. Some false membrane was coughed into the opening. A Durham's tracheotomy tube was inserted, the inner tube, however, being removed. The child was placed in a bed without curtains; steam was diffused into the room generally from a bronchitis kettle, the temperature of the room being kept at 65° F. Great care was taken in nursing the child, portions of membrane and secretion being removed as fast as they were coughed up. The tube also was removed and cleansed whenever it appeared at all blocked. It was removed for the first time in the afternoon of the day of operation, and after that about once or twice daily; and on the seventh day was removed for good. The child made a good recovery, but slight hoarseness persisted for some months. The special points to which Mr. Lawson directed attention were—1. The tracheotomy wound above the thyroid, as more easily done than below it. 2. The use of a single tube, by which a larger channel was maintained, and its frequent removal for cleansing, which greatly helped in the successful result. 3. The non-employment of a tent, into which steam is conveyed. This he had long thought to be a mistake, and therefore decided not to employ it in this case, trusting to the general warming of the air of the room by the steam from a kettle on the fire. The success was greatly due to the care and supervision of Mr. Morton, aided by the indefatigable labours of the child's father and the nurse.

Mr. PUGIN THORNTON read notes of a case of Successful Tracheotomy in the last Stage of Diphtheria. The case occurred in a family attacked in a small outbreak of the disease in St. John's-wood in September last, in which four houses only were apparently attacked. The subject of the paper was a boy three years old, one of a family of three, the other two children having died before he was tracheotomised, their ages being respectively four years and a half and one year. This child was first taken ill on Sept. 16th, the day after the eldest had died. At first he was taken with laryngeal symptoms, but these passing off the tonsils were found to be covered with membrane. On the 27th, the eleventh day of his illness, his larynx again became affected, and from that day to Oct. 1st his breathing progressively grew worse. Mr. Thornton then saw the child, and performed tracheotomy at once. At the time of the operation the boy laboured under great dyspnœa, being extremely restless, with his face slightly livid. There was no albuminuria. For some days following the operation pieces of membrane were coughed up through the mouth, or removed with forceps through the tracheal wound, and three weeks after double strabismus set in, lasting for a fortnight. A further proof of the diphtheritic nature of the disease was added by Mr. Thornton himself becoming affected with a mild tonsillar form of the affection on the fourth day after first seeing the case. The boy has since done well, but his progress has been very slow, for the cannula is still being worn, although five months have elapsed. During the day the tube is completely closed with a cork, the child talking freely and running about the house, but at night-time the cork has to be removed, because of dyspnœal attacks which come on when he falls asleep with the tube closed. Iron and chlorate of potash was given internally, and a spray of lactic acid was used to detach the membrane. The other two children died from laryngeal obstruction, so that the cases afford an instance of fatal family susceptibility, paralleled by another family of three children, all of whom died from laryngeal complication in the epidemic at St. John's-wood last summer. Mr. Thornton hoped that this case and that of Mr. Lawson's would help to show that tracheotomy in diphtheria is a more hopeful procedure than many consider it to be.—Mr. MAUNDER said it was gratifying to have evidence of successful tracheotomy in two instances, because it must be the experience of most that the majority of cases associated with false membrane perish. Mr. Lawson was right in attributing recovery largely to the close attention of two competent and indefatigable assistants. If it were possible no tube should be used in these cases, and the membrane should be removed as fast as it appeared at the wound. Some years ago he had a pair of forceps made to keep the tracheal wound open, to obviate the use of a tube.—Dr. COUPLAND said there was then a child five years old under his care at the Middlesex Hospital upon whom Mr. Morris had performed tracheotomy five days before. The child had been ailing a few days, and for about thirty-six hours had symptoms of laryngeal obstruction. When brought to the hospital there was great stridor, retraction of soft parts with inspiration, and such urgent dyspnœa that it was thought well to have the operation performed forthwith. There was diphtheritic exudation on the tonsils, and one-third of albumen in the urine. The details of the operation and the after treatment were much the same as those described by Mr. Lawson. The case was progressing favourably; the faucial exudation had almost cleared away, and the albumen had disappeared from the urine. The case was an example of the value of the *early* performance of tracheotomy.—Mr. MORRIS added that the operation in this case was the low one.—Mr. BARWELL said much of the success of the operation depended on the frequent removal of the tube and withdrawal of false membrane. In a case to which he was called by Dr. Silver—a child on the point of death from dyspnœa—great relief was obtained by the operation, and much false membrane expelled, but death took place from extension of the exudation into the bronchi. Success must in great measure depend on the place and extent of the disease.—Dr. SILVER said that the sister of this patient came afterwards into the hospital with membrane limited to the

tonsils. Had tracheotomy been done in her case, her recovery would have been wrongly assigned to the operation.—The PRESIDENT said that although he had had large experience of diphtheria, his experience, like Mr. Maunder's, was that cases of laryngeal complication had not recovered even after tracheotomy. He believed with Mr. Lawson that the use of a tent-bed, filled with steam only, retarded recovery, and he had made somewhat similar suggestions in a lecture in THE LANCET ten or twelve years ago. The experience of surgeons in Edinburgh and Glasgow was more satisfactory than in London.—Dr. DUCKWORTH thought a temperature about 65° had a debilitating effect on the patient.—Mr. H. MARSH said that the question of steam and tent-beds had been much debated at the Children's Hospital, and been generally discarded since Sir W. Jenner was physician. But cases in which the trachea was dry did well if steam were introduced. Mr. Marsh had operated on fifty cases with eight recoveries. In one case a child died from secondary hæmorrhage. He believed that even these eight would have died had not tracheotomy been performed.

Reviews and Notices of Books.

The Localisation of Cerebral Disease. Being the Gulstonian Lectures of the Royal College of Physicians for 1878. By DAVID FERRIER, M.D., F.R.S. London: Smith, Elder, and Co. 1878.

THE doctrine of "cerebral localisation" is more securely based upon clinical and pathological observation than upon physiological experimentation: not that the one could have been employed without the facts gleaned from the other. The two methods are complementary one of another; the experiments wrought by disease are repeated and demonstrated artificially, and the harmony between the results obtained in the two cases goes far to establish the truth they illustrate. It was the deductions made from close observation of the phenomena of epilepsy that led to the framing of the hypothesis of cerebral localisation. Experiment followed, and records of cases of limited lesions of portions of the hemispheres came to light to support the truth of the hypothesis. The doctrine of cerebral localisation has called for greater exactitude and precision in the description of clinical phenomena and pathological effects than has hitherto been deemed necessary. Careful and minute observation of the extent, degree, and kind of paralysis or spasm, and the exact record of the situation of the lesion in relation to the brain, are essential to the prosecution of the study with anything like success. And it is truly remarkable to how great an extent the observations of Hitzig and Ferrier—the pioneers in the physiological investigation of the functions of the cerebral cortex—have been confirmed by carefully recorded clinical facts. We welcome this volume, then, as a valuable contribution to the question. Within the space of three lectures, Dr. Ferrier has managed to convey, in clear and unmistakable language, the precise amount of knowledge now prevalent concerning the functions of the brain as derived from the study of lesions induced by disease.

A Handbook of Uterine Therapeutics and of Diseases of Women. By E. J. TILT, M.D. Fourth Edition. London: J. and A. Churchill.

THIS work has reached a fourth edition, and from this it may be fairly inferred that it has proved of use to the profession. The present edition is larger than the last, and is in part rewritten. The work consists of an introduction, and a series of chapters on diseases of women and their treatment, arranged under headings of various forms of medication—as "tonic medication," "sedative medication," "specific medication," &c. The introduction is a "little mixed," consisting of brief observations on many topics: as, the difficulties attending the study of diseases of women; women practitioners; the reign of the knife. Under the latter subject the author writes as follows:—"The mischief done by Simpson, and by the routine practice of his pupils, was limited to women in want of children; but Dr. Marion Sims pretends that bilateral cutting of the cervix, down to its vaginal attachments, not only cures sterility, but dysmenorrhœa, uterine displacements, and chronic inflammation of the womb. Huguier had taught us to amputate the cervix when it had become much too long; but, says Dr. Marion Sims, 'if women want children, we must amputate the cervix when it projects more than half an inch into the vagina.' It is really difficult which most to admire in Dr. Marion Sims' 'Notes,' the author's surgical ingenuity or his profound ignorance of pathology." Other passages equally spirited may be found in the volume, but we wish that the author had given us in these places something besides funny comments. A little further on we come upon advice to a medical student, and stumble upon the modest recommendation "to first study the physiology and diseases of menstruation, in the third edition of my 'Uterine and Ovarian Inflammation.'" Passing to the main part of the work, the author gives a good account of the various methods of examination of the pelvic organs, and dietetics and home treatment. The therapeutics recommended in the work are generally of the extremely active and do-something character. The greater part of, in many cases, a useless pharmacopœia is in turn marshaled out to do duty—a practice we venture to think is only less injurious than the "reign of the knife," because of its less fatal character. There is little doubt that in other respects its effects are very deleterious, especially upon the nervous system of the patients. The author seems to have a healthy aversion to frequent recourse to the knife in the treatment of uterine disease, as well as to the "orthopædic" system of treatment.

The Quarterly Journal of Microscopical Science. Edited by E. RAY LANKESTER, WM. ARCHER, F. M. BALFOUR, and E. KLEIN. No. LXXIII., Jan., 1879. London: J. and A. Churchill.

THIS number, which completes the eighteenth volume, contains five memoirs. The first, by Mr. Balfour and Mr. Sedgwick, on the Existence of a Head-Kidney in the Embryo Chick, and on certain points in the Development of the Müllerian Duct; the second, by Henry B. Brady, on some of the Reticularian Rhizopoda of the *Challenger* Expedition; the third, by O. Bütschli, Researches on the Flagellate Infusoria, and allied organisms; the fourth, by Mr. Balfour, on the Morphology and Systematic Position of the Spongida; and the fifth, and last, by Timothy Lewis, on Flagellated Organisms in the Blood of healthy Rats.

Mr. Balfour and Mr. Sedgwick supply some interesting information in regard to the development of the Müllerian duct, and state that in the earliest condition in which they have been able to observe it, it consists of three successive open involutions of the peritoneal epithelium connected together by more or less well-defined, ridge-like thickenings of the epithelium, the permanent abdominal opening of the Müllerian duct corresponding with the anterior of the three grooves. The head-kidney itself takes origin from the layer of thickened epithelium, situated near the dorsal angle of the body cavity, close to the Wolffian duct—that is to say, from the germinal epithelium. The author describes also the development of the Wolffian duct.

Mr. Brady describes, and illustrates by some admirable coloured drawings, new species of Psammosphæra, Sorosphæra, Pelosina, Hyperammina, Jaculella, Marsipella, Rhabdammina, Rhizammina, Sagenella, Astrorhiza, Aschemonella, Thurammina, Lituola, Placopsilina, Rheophax, Trochammina, and Cyclammina, obtained by dredging or by the tow-net in the *Challenger* expedition.

Professor Bütschli's article, which is a long one, and has been carefully translated by Mr. D'Arcy Power, deals with the Flagellate Protozoa and Infusoria, and gives a specific account of the organisms he has examined.

Mr. Balfour assigns reasons, drawn from a study of the development of the sponges, why a special division of the Protozoa should be made for their reception.

The researches of Mr. Lewis on the hæmatozoa of rats are exceedingly interesting. They are flagellated, and do not appear to be present in the blood of mice.

HEALTH OF THE ARMY.[1]

No. I.

THE Report on the Health of the Army, at home and abroad, for the year 1877, which has just been presented to Parliament, shows results which, on the whole, are very satisfactory. The admissions into hospital were in the proportion of 946, and the deaths, in and out of hospital, 9·55 per 1000 of average strength, both lower than in 1876, and considerably under the average of the last ten years. There was a slight increase, compared with the preceding year, in the number of men sent home, in the number finally discharged as invalids, and in the constantly non-effective from sickness, but they all corresponded very closely with the average.

Among the troops serving at home the proportion of admissions per 1000 of strength differed little from that of the preceding year, and the variations in any of the classes of diseases were not more than might be expected from the ordinary fluctuations in figures. The rate of mortality was 1·23 per 1000 of strength lower than in 1876, the difference being mainly due to a reduction of ·84 per 1000 in the deaths by phthisis, and ·33 per 1000 in those by diseases of the circulatory system. There does not appear to have been any special prevalence of disease calling for notice. The usual information relative to the working of the Contagious Diseases Acts is given; but as we noticed this subject so very recently it appears unnecessary again to advert to it. The report shows the Foot Guards to have furnished the highest, and the Departmental Corps the lowest, proportion of admissions into hospital; but as the usual table of the classes of diseases by which the admissions from each arm of the service were occasioned has been omitted, we are unable to trace the causes of the marked difference between several of them. That this is deserving of investigation must be admitted, when we find the admissions from the Household Cavalry to have been 619, and from the Foot Guards 1016; from the Royal Engineers 641, against 819 from infantry regiments; and from the Royal Artillery 777, as compared with 888 from the Cavalry. The mortality ranged between 4·12 per 1000 in the Household Cavalry, and 10·68 in the Brigade depôts; but the high ratio in the latter was doubtless due, in a considerable degree, to the number of men in them whose constitutions had been broken down by previous tropical service, and who joined from the service companies with chronic disease thus induced. When to the deaths which occurred while actually serving are added those of men placed on the pension list during the year, who died before December 31st, the rate of mortality in the different arms is as follows:—Household Cavalry 4·03, Cavalry 6·17, Foot Guards 6·88, Infantry (including Depôts and Departmental Corps) 8·45, Royal Artillery 8·88. The Royal Engineers are omitted from this table; the rate of mortality in them, without the correction for deaths among the invalids after discharge, was 8·95, being a trifle higher than in the Royal Artillery. These ratios are all considerably under the average of the preceding ten years. The omission of the usual tables showing the relative prevalence of the various classes of diseases, and of the causes of death in each arm of the service, is explained by "Clause 51 of the Army Circular for 1877 having abolished all regimental returns except for the Household Troops." To the same cause, we presume, is due the absence of the "table showing the admissions, deaths, invaliding, and the number of daily sick in each corps." The abolition of these tables appears to us to be a very serious mistake. It is of great importance to trace the causes of the differences, sometimes very marked, in the amount of sickness and mortality in different corps. It is just possible that the Head of the Medical Department may have the means of tracing these; but if he has, why is not the information to be published as heretofore? If he has not, then he has lost a most important means of watching over the sanitary condition of the troops, and of ascertaining the existence of causes injuriously affecting their health. Is it possible that this case is a further development of the cheese-paring economy of H.M. Stationery Office, which has already struck so many valuable tables out of these reports? We recommend this subject to the consideration of such members of Parliament as take an interest in the welfare of the soldiers, and understand the value of statistics in promoting sanitary reforms.

Passing now to the troops serving abroad, we find that at Gibraltar the admissions into hospital corresponded closely with the proportion in 1876, and with the average of the last ten years; but there was an increase in the rate of mortality which exceeded the average by 1·42 per 1000. The lowest ratio, both of sickness and death, was in the 1st batt. 4th Regiment, and the highest in the 102nd Regiment; the 2nd batt. Rifle Brigade had also low rates, and had the smallest proportion constantly sick of all the corps in the garrison, but it was scarcely exceeded by the 4th. The highest proportion was furnished by the Royal Artillery, and amounted to 55 per 1000 of the strength; this was attributed to the prevalence of fever in the corps. The high rate of admissions in the 102nd is said to have been caused by fever and rheumatism, and that of deaths by phthisis, but no reason is assigned for their greater prevalence in it. None of the remarks on the different classes appear to require special notice unless it be those on "poisons." "The rate of admissions exceeds that of the preceding year by 4·3 per 1000 men. The admissions of men of the Royal Engineers for diseases of this class are double those of any other corps, the strength of the Royal Engineers being only about half of that of an infantry battalion." It is probable that the cases were mostly delirium tremens, or some form of alcoholism, but no clue is given to this in the report, and the suppression of the abstracts of diseases, of which we complained last year, prevents our verifying this supposition. In a matter of so much importance from a sanitary point of view as intemperance a little more detailed information would not be misplaced.

At Malta the admissions were more numerous than in 1876, and 91 per 1000 above the average of the last ten years. This was probably the result of the arrival of the 2nd batts. 2nd and 13th Regiments in the beginning of August, the very height of the hot season. As a natural consequence, they furnished a very large number of cases, the excess being most marked in bowel affections. Exclusive of these two corps, the highest proportion of admissions was furnished by the 71st and 27th Regiments, and of deaths by the Royal Engineers; the strength, however, of the latter corps was so small as to render any deduction on this head deceptive. Excluding it, the deaths were highest in the Royal Artillery and 98th Regiment. The remarks on the classes of diseases require no notice—they are simply without either interesting or useful information. The Royal Malta Fencible Artillery show a satisfactory health-state; there has been a decrease in both admissions and deaths. Conjunctivitis has been much less prevalent than formerly—a result attributed by the medical officer "to the salutary effect of the frequent and systematic inspections made for its detection."

In the Dominion of Canada the troops enjoyed their usual good health, both sickness and mortality being under the average. The only unsatisfactory point was the increase of diseases of the digestive system and of admissions under the class of poisons. On this the medical officer remarks that "chronic alcoholism was a very prevalent condition; to its existence a large part of the admissions for dyspepsia was due, and its hurtful influence complicated the illnesses of many of the men admitted for accidents." Bermuda also furnishes very satisfactory results, for although the ad-

[1] Army Medical Department Report for the year 1877, vol. xix. arliamentary Blue-book, pp. 254.

missions were slightly higher than in 1876, the deaths were lower, and both were much under the average of the last ten years. Of nine deaths, two were from alcohol taken in a poisonous quantity, and one by suicide—events which we must not be supposed to include under the description of "satisfactory."

In the West Indies the admissions and deaths among the white troops were much higher than in 1876, and considerably above the average. The excess of sickness was chiefly in fevers and constitutional diseases, and of deaths in those by yellow fever. Continued fevers and febricula were more prevalent than usual, but we are not informed whether this was in Jamaica or Barbadoes, nor to what they were attributed. All the cases of yellow fever, amounting to eleven, of which ten proved fatal, were in Jamaica. The first case among the military was admitted on July 7th, in Kingston, where it is stated "sporadic cases are supposed to have occurred among the civil population." The patient was a sergeant of the Army Hospital Corps, who died. The next case was that of an officer, at his residence, about twelve miles from Kingston, on the 21st of October. On November 12th the first case at Newcastle occurred in the Royal Artillery, and the battery was moved on the 14th to a camp of isolation half way between Newcastle and Kingston. The next case was in the Infantry, on the 5th December, followed by two on the 7th, one on the 9th, 10th, 16th, 22nd, and 23rd respectively, when all the occupied huts on the infected ridge were vacated, and the occupants moved into camp on "Farm Ridge" and "Alberga Knoll." "The removal of the troops had the effect of putting an end to the epidemic, for no further cases occurred among them." It is, we think, to be regretted that the infantry were not moved into camp on the occasion of the first case among them, as was done with the artillery. No reason is assigned for the delay. The principal medical officer is of opinion that the disease was imported, but no information is given in the volume before us as to the grounds on which this opinion was based, or the quarter from which the importation is supposed to have taken place. The increase of admissions for constitutional diseases was the result of a great prevalence of syphilis among the troops at Barbadoes. The admissions into hospital from the black troops were slightly above, and the deaths below, the average, but the difference was trifling. Only one case of yellow fever occurred among them—a sergeant on recruiting duty at Savannah la Mar, who recovered. Phthisis continues to be the chief fatal disease among this class of troops; it was the cause of nearly half the deaths.

On the West Coast of Africa paroxysmal fever and syphilis were more than usually prevalent among the black troops, but the deaths were under the average. As among the same class in the West Indies, phthisis was the chief cause of mortality.

At the Cape of Good Hope and St. Helena the admissions and deaths, though rather higher than in 1876, were still considerably under the average. Six of the deaths were from accidental causes, and one from a wound received in action. The ratio of deaths from disease was only 6·42 per 1000 of the strength—a satisfactory proof of the healthiness of the climate.

At Mauritius the proportion of admissions was higher by one-third, and that of deaths thrice as high as in 1876, but the excess of the latter was chiefly due to four men having been accidentally drowned. The high ratio of sickness was caused by ague, the admissions by it having exceeded those by all the other diseases together; it is stated to have prevailed also among the civil population, but no details are given, nor is any probable cause assigned for this great increase. Indeed, the surgeon-major in charge says "the general health of the troops, considering that malarious fever is endemic in the island, has been fair." We cannot agree with him on that point, and we consider that an increase of admissions to the extent of more than the average strength of the force, calls at least for some explanation of the circumstances under which it occurred.

In Ceylon there was a marked increase both in the admissions and deaths as compared with 1876, but the former were under and the latter only slightly above the average. It took place chiefly in fevers, rheumatism, and diseases of the digestive system. The high rate of mortality from fevers—6·50 per 1000 of strength—was due to enteric fever at Galle. Only two cases of cholera (both fatal) occurred among the troops, though the disease was epidemic in several parts of the island. The mortality from diseases of the digestive system was caused chiefly by hepatic disease.

The troops in China and the Straits Settlements were more than usually exempt from disease, and the deaths were slightly under the average. The reduction in sickness was chiefly in the class of fevers, and in the diseases of the digestive system; the latter is stated to have been a result mainly due to the cessation of field operations in the Straits Settlements. No table is given, as in most of the other stations, showing the health of the different corps employed; nor is any distinction made in the table of admissions and deaths by the various classes of diseases in China and the Straits respectively. From some remarks of the Principal Medical Officer in the Sanitary Report, we learn that the health of the troops at Hong-Kong "was not nearly so good as in 1876," while "the health of the troops in the Straits Settlements may be considered as having been very fair"—evidently much better than in the preceding year, as the average of the two commands is lower. This mixing up of the returns of two totally different stations, without any details as to the prevailing and fatal diseases in each respectively, is very unsatisfactory, depriving the reports of much of their value as showing the geographical distribution of disease, and rendering them useless, from an administrative point of view, in studying the causes of sickness and mortality among the troops at each station.

HEALTH OF LARGE ENGLISH TOWNS IN THE NINTH WEEK OF 1879.

DURING last week 5267 births and 3764 deaths were registered in twenty of the largest English towns. The births exceeded by 84, and the deaths by 394, the average weekly number during 1878. The deaths showed a further increase of 148 upon the numbers returned in the two preceding weeks, and were equal to an annual rate of 26·6 per 1000, while in the two previous weeks the rates had been 25·1 and 25·6. During the past nine weeks of the current quarter the death-rate in these towns has averaged 27·0 per 1000, against 22·7 and 25·8 in the corresponding periods of 1877 and 1878. The lowest rates in the twenty towns last week were 17·6 in Plymouth, 17·8 in Brighton, 18·9 in Bristol, and 19·8 in Portsmouth. The rates in the other towns ranged upwards to 28·1 in Oldham, 28·7 in Salford, 30·8 in Leeds, 32·4 in Leicester, 33·6 in Liverpool, and 34·5 in Manchester. Since the beginning of the year the annual death-rate has been equal to 35·0 in Liverpool, and 35·6 in Manchester and Salford; whereas it has not averaged more than 27·0 in the twenty towns, and has been as low as 19·3 in the borough of Portsmouth. The 371 deaths referred to the seven principal zymotic diseases in the twenty towns last week showed a further increase of but three upon the low numbers returned in recent weeks; they included 120 from whooping-cough, and 103 from scarlet fever, while the fatal cases of fever and of measles continue considerably below the average. The annual death-rate from these seven diseases averaged 2·6 per 1000 in the twenty towns, corresponding with the rate in each of the two preceding weeks; it ranged from 0·0 and 0·5 in Brighton and Bristol, to 4·9 both in Sheffield and Wolverhampton. The fatal cases of scarlet fever showed a slight increase upon the low number in the previous week; they were proportionally most numerous in Birmingham, Oldham, and Bradford. Whooping-cough showed excessive fatality in Sheffield, Manchester, and Leeds. Two fatal cases of diphtheria were recorded both in Birmingham and in Salford. Small-pox caused 22 more deaths in London, and 1 in Manchester; the latter was the first fatal case of small-pox registered since the middle of November last in the nineteen large provincial towns, which have an estimated aggregate population of more than three and a half millions of persons.

DR. WALTER F. CROSSKEY has been presented with a handsome silver inkstand, inscribed—"Presented from the Lewes Union Benefit Society to W. F. C., 1879," as a slight mark of the confidence the members reposed in his professional skill.

THE LANCET.

LONDON: SATURDAY, MARCH 8, 1879.

WE have been favoured with an intimation that summonses have been issued for the General Medical Council to meet on Tuesday, the 18th inst. We are glad to be able to announce the fact. Better late than never. Had the Council delayed still longer, and suppressed its views on its own constitution till July or August, it would have sunk irrecoverably in the estimation of those who wish to respect it. We are not sure now that the summons comes in time to save the respect of the profession. All will depend on the use the Council makes of its time. If it goes over the Bill of the Government again clause by clause, after having been twice over it before; if it postpones the consideration of its Executive Committee's report on its own constitution to the last day or two of its session; if it adopts the view of the Government that the Medical Bill, as it exists, should pass this session, and legislation on the Medical Council be postponed till next session, with all the uncertainties of a general election intervening, then we are sure that the Medical Council will not save the respect of the profession. If, on the other hand, it seriously undertakes to deal with the really new and very grave questions that are pressing for solution, and shows itself superior to the vulgar considerations which are apt to dominate corporations—for the Council is an incorporated body,—then possibly the feeling of the profession may be somewhat modified. The Council, or rather the Executive Committee and the President of the Council, have made a great mistake in not arranging to meet sooner. The question of the Medical Council could easily have been dealt with in the current session, and disposed of along with the other subjects needing legislation. They are all connected and related. They hang together, and cannot be properly dealt with in separate Bills, to say nothing of the probability of years elapsing before Parliament will be disposed to deal with medical questions again, if what is considered a large Government measure is once passed.

There are three questions that seem to us to be in the front of this subject; and as the Bill of the Government in its details has been before the Council already for a year, we may hope that the Council will deal with them early, and with much attention. These three questions must inevitably be fought out in Parliament, even if they are neglected or evaded in the Medical Council. They are—

1. The Constitution of the Council.
2. The Powers of the Council.
3. The Limitation of the Council's Work.
4. The Supersession of the Council by its President and Executive Committee.

Time will be really redeemed if the next meeting of the Council is devoted to these subjects. If, on the contrary, it is spent in going over ground that has been already gone over twice it will be wasted. The profession is concerned in these subjects. It is in a state of tension, as well it may be, from the way in which it has been treated for years past by Governments and by the Medical Council. And this state will become one of deeper irritation and wider estrangement if the Council, on reassembling at this crisis, shall fight old battles over again, and shirk the really great questions that call for its attention.

AFTER the astounding treatment which the medical profession has received at the hands of Lord COLERIDGE—by no means the first onslaught made by the same judge in different portions of his career—it is necessary that the position of defence should be changed for attack. We have allowed some time to elapse since the severe sentence on Mr. MILLERCHIP, of Coventry, for neglect of his duty as a Poor-law medical officer, and we have carefully considered and reconsidered the whole bearings of the case with a view to eliminate any possible source of fallacy, and withal to allow prejudice of any and every description to cool down before discharging what we hold to be an inexorable, though painful duty. The facts, as regards Mr. MILLERCHIP, a medical officer, who was recently sentenced to four months' imprisonment with hard labour for not attending a case to which he was summoned on the order of the relieving officer of his district, are simply as follows: (1) The message was sent in each instance by children, although the husband of the sick person was out of employment, and in a condition to come himself, in which event he would have ascertained the true state of affairs; (2) the medical officer was himself ill, having recently undergone a very serious surgical operation for a malady of an exceedingly painful character; (3) it is certified by competent medical practitioners that he was an epileptic, and had two severe fits within the ten days next preceding the neglect charged against him. There was, in truth, the most conclusive reason to believe that he had not received, or had wholly forgotten, the message sent. It is needless to add a word in support of the assertion that under these circumstances Lord COLERIDGE passed a sentence of maximum harshness against the prisoner. The facts are so plain that it is impossible to suppose the Crown will not intervene to shorten the duration of the penalty inflicted when the matter is brought under the notice of the Home Secretary.

In a recent case at Godalming, Surrey, a district medical officer has been absolved from the charge of negligence in attendance on a midwifery case, in which no nurse was provided and the poor woman was obviously not in a condition to be confined in her own dwelling unless the guardians were prepared to supplement the order for medical assistance by the provision of necessaries. This brings us to the gravamen of the charge we are bound to make and prepared to support against the guardians and overseers of the poor generally—namely, that they abuse the power of giving orders for medical attendance, by employing this form of relief as a substitute for that which would fall more directly on the rates—namely, the supply of necessaries. A needy pauper, male or female, is put off with an order for "the doctor" when it is practically impossible that any medical man, be he the most earnest and devoted in his profession, can treat the case properly or safely under the conditions in which it is left by those who give the order!

Young medical men and members of our profession who are induced to accept local appointments at inadequate salaries have no notion, until they enter upon the duties they have undertaken, how difficult and irksome they are. If the disappointment that ensued were simply personal, the grievance would be a small one, but the public are the sufferers, and the poor go to the wall. Boards of guardians, having secured their medical servant at a fixed stipend, set themselves resolutely to make the most out of his services, not only directly, but indirectly. They appease the clamour of the poor for aid in the sickness induced by want with an order for medical attendance, and they seek to justify the claim made upon the public funds for aid in sickness by the same *placebo*—an order for the doctor,—when the instant supply of costly necessaries, or removal to an infirmary, is the essential preliminary condition, without which medical assistance can be of no sort of use or benefit.

It is time these grave allegations against the policy of Poor-law administration throughout the country, with here-and-there exceptions, should be made plainly; and we do not hesitate to offer them as a rejoinder to the recent charges urged against a body of men who are most unfairly used by their employers, and who, if they were less hampered by considerations of humanity (which we begin to fear are too sentimental and wholly misunderstood) would resort to the not unsuccessful, though embarrassing, expedient of a general refusal by common consent to occupy a position at once untenable and intolerable in presence of the most ordinary feelings of self-respect. The time has arrived when the position and work of the Poor-law medical officers generally must be regarded from a new standpoint. It is no longer enough that this large section of the profession should act on the defensive. Lord COLERIDGE, by his severe sentence on the epileptic (and otherwise afflicted) medical officer of Coventry, has changed the aspect of the question completely, and it is now for the medical men engaged in the Poor-law service to organise a new and positive movement which shall have the effect of making clear to the public and the Legislature, not only that the existing relation between the medical officers and boards of guardians is strained and embarrassing, but that it is one which renders the honest and adequate discharge of duty to the sick poor impracticable, and cannot therefore any longer be permitted to continue, however great the inconvenience which must follow upon this change of tactics may prove.

THE question of the advantage to be gained by combining a physical competitive examination with the literary one to which candidates for commissions in the army are now subjected, was brought under the consideration of the House of Lords last week by Earl FORTESCUE. He based his support of it upon the recommendation of the joint committee of the War Office and the Civil Service Commissioners, appointed to inquire into the subject, but added nothing to the reasons assigned in favour of it in their report. When that report was published, we pointed out[1] the injurious consequences likely to follow its adoption, and the injustice it would inflict upon a large class of the candidates, and we are now glad to learn that the Secretary of State for War has considered the difficulties which would attend it to be of so insurmountable a nature that he will not advise the Government to carry it out. The scheme was supported by Lord HAMPTON, Viscount HARDINGE, and Lord TRURO. Viscount HARDINGE adduced three special reasons for its adoption:—The first was that "it was quite impossible to judge of a man's powers of endurance by his looks; it required the physical fatigues and dangers of a campaign to show what was in him"; but, curiously enough, he omitted to show how a competitive examination by the Civil Service Commissioners within easy distance of London could in this respect supply the place of a campaign. The second reason was that the noble lord had been told on high authority "that officers in India rode infamously, and as they came from Sandhurst, the inference was that riding there was not, to say the least of it, what it should be." This would appear to be a very good reason for improving the instruction in the riding-school at Sandhurst, but would certainly not justify the expense and trouble involved in the proposed scheme. The third reason assigned was that "as to the medical examination, it was by no means so strict as it might be. The candidates, he understood, only had their chests tapped and their legs examined for varicose veins, and some greater security than at present existed as to the physical capabilities of officers certainly seemed to him to be required." We have repeatedly heard complaints made by the friends of candidates of the strictness—unnecessary, as they termed it—of these medical examinations, but we now for the first time hear of them not being so strict as they might be. The examiners themselves must be considerably amused at the off-hand description given by Lord HARDINGE of the manner in which they discharge this important duty. Even if there were any real ground for this opinion, it would be simpler to issue more stringent regulations for the medical examination than to introduce the complicated machinery which would be necessary to carry out efficiently the recommendations of the Committee. Lord TRURO "insisted that it was equally necessary that these men [the candidates for commissions] should have moral force of character and discrimination in reading character." But the exact relation between these no doubt very desirable qualities, and the tests proposed by the Committee, such as the power to walk a mile in eight minutes and a half, to run one in five minutes, to leap a height of five feet or a breadth of eighteen feet, is not very obvious. Viscount BURY, the Under Secretary of State for War, while he admitted that if the proposed system would introduce into the army a better class of men it would be the duty of the Government to give it a trial, denied that such would be the case, and maintained that, as at present we get as fine a body of young men as it would be possible to obtain, any change in the system is uncalled for. In this view he was strongly supported by the Duke of CAMBRIDGE, who bore testimony to the admirable physical qualities of the young officers, and quoted a similar opinion given by the Quartermaster-General with regard to the students now at Sandhurst. Viscount CARDWELL endorsed the views of the War Minister on this subject, which he conceived were fully justified by the evidence of the Committee itself. We have been struck

[1] See THE LANCET of July 27th, 1878.

with the absence of proof on the part of the supporters of this additional examination of any deficiency in physique of the candidates which would justify its adoption. The object of the Government ought undoubtedly to be, as expressed by Lord FORTESCUE, "to secure the selection only of those who in every way would make the most efficient officers." But if this is secured by the regulations now in force, as we have the highest authority for believing, it would be an act of folly and injustice to add another examination to those already existing, attended with increased expense to the parents of candidates, and considerable risk of injurious consequences to the candidates themselves.

THE working of the Metropolitan Asylums is bringing into wonderful prominence the State importance of infectious diseases and the unsatisfactory way in which the duty of checking their spread is discharged by the local authorities, at least of the metropolis. The present decade will be remarkable for its illustrations of these points. When Mr. HARDY brought forward his memorable Metropolitan Poor Bill of 1866, we ventured to think he did not anticipate the facts which we are about to consider, and which we have noticed incidentally already. It will be remembered that this Bill had its origin in the startling disclosures which were made by the Commissioners of THE LANCET of the inadequate way in which the sick poor were accommodated and treated in workhouse infirmaries. To remedy these evils, the Government of the day—virtually the Government now in power—was constrained to take the treatment of those paupers affected with infectious disease, and of the imbecile, out of the hands of the guardians, and place them under the separate care of the Metropolitan Asylums Board. In other words, the class whose benefit was wholly contemplated in the creation of the Metropolitan Asylums was the pauper class. Under these circumstances it is curious and instructive to notice that this class is very slightly represented among the patients in the hospitals under the care of the Managers of the Metropolitan Asylum District. This fact comes out very strikingly in the course of a correspondence that has been going on for two years past between the Metropolitan Asylums Board on the one hand and the various sanitary authorities of the metropolis on the other. The Committee for General Purposes of the Asylums Board—to which the question of the accommodation of small-pox patients, *not being paupers*, was referred by the Board—in February, 1877, reported as follows:

"The experience of the small-pox epidemic of 1871, and of that now existing, shows that a large proportion of the patients received into the hospitals of the managers belong to a class above that of paupers, although they are sent as paupers, with certificates from the parochial medical officers and relieving officers."

In other words, a large proportion of the patients in such hospitals become pauperised for the purpose, and in the process, of admission to these hospitals. The actual proportion will surprise many of our readers, but is well known to the officials to be very large. Special inquiries made by the General Purposes Committee above referred to, on the 15th of February, 1877, showed the proportion of patients who acknowledged to having previously received parochial relief to be under 10 per cent. We have heard of very trustworthy personal investigations in which the number has been found to be under 5 per cent.

The bearings of this most remarkable fact are too numerous and too important to be discussed in a single article. Various questions arise out of the fact to which we should like to have answers. To us not the least interesting bearing of the fact is the illustration it affords that there is such a large proportion of the population not discredited by pauperism, save in the matter of treatment for infectious disease. We see nowadays such wonderful demonstrations that the people are all being pauperised by one thing or another that it is refreshing to find that 90 per cent. of those coming into the metropolitan asylums have never before received parish relief. The fact is the more significant, inasmuch as the people must be of that class which is nearest to pauperism. Those with any material savings would, we should think, prefer treatment at home, or to pay the sum requisite for more private and comfortable accommodation supplied by the Fever Hospital, or the Small-pox Hospital at Highgate.

The important question arises, Is it right that institutions created for the poor should be used chiefly by those who are not, in the legal sense of the word, poor? Have the asylums not been diverted from their original use and purpose to the advantage of classes that have hitherto been able to pay for all they needed, and who presumably should pay for accommodation and treatment when ill of diseases which may be either anticipated or prevented? This question is not to be hastily answered, the more so as the State now assumes the right of *placing* those suffering from infectious diseases who happen to live in homes not suited for such cases. It would perhaps be hard to compel the removal of patients in the interest of the State, and then to fasten the stigma and the disabilities of pauperism upon them. Nevertheless the fact remains that 90 per cent. of people who have never been paupers before are being treated in hospitals that were built to afford better accommodation to those who without them would have been treated in Workhouse Infirmaries.

One thing at least seems clear, that if the State or the ratepayers are to support huge establishments for the benefit of the paying as distinguished from the pauper classes, and if this is the duty of the State, or rather its interest—for in the long run the State will act selfishly,—then the State or the ratepayers, who are heavily mulcted in the matter, have a right to insist that these institutions shall be used so as to curtail, and not promote, the spread of zymotic disease. Whether the State is getting such a *quid* for its *quo* or not we shall have to inquire on another occasion. In other words, we shall have to deal with the question whether we are not using the metropolitan asylums as great manufactories of pauperism, and perhaps of disease; and, if so, whose fault is it? and what is the remedy of a state of things so unsatisfactory?

AN unexpected prominence has been given to the discussion on plague at the Epidemiological Society, from its having been the occasion of eliciting, in the House of Lords, a statement from the Duke of RICHMOND and GORDON as to the intentions of the Government regarding quarantine. The Lord President thought it desirable to inform

the House, and through the House the public in general, that whatever the medical merits (or demerits) of quarantine might be, the quarantine law was in force, and that, as the member of the Government responsible for its administration, he was determined to see that it should be fully administered. He further stated that the Customs were quite prepared to carry out the law, and that it gave ample powers to the Privy Council of taking the necessary precautions against plague. This statement was received with cheers by the House!

The quarantine law, it must be remembered, gives the Privy Council power, not only to deal with the matter of maritime quarantine as affecting our ports, but it gives them also, if we read it aright, the largest powers for issuing orders for applying quarantine in any emergency of infectious disease arising in the kingdom. If the Lord President's statement is to be taken literally, the Privy Council contemplates reviving the whole of the powers it may exercise under the Quarantine Act, irrespective of the public health law of the kingdom. It would be an insult to the Privy Council and to the House of Lords to suppose that any such course was contemplated. We interpret the Lord President's statement as meaning that the Privy Council is prepared to carry out quarantine to the extent necessary to remove disabilities from our shipping in foreign ports where quarantine is practised. That the Earl of CARNARVON, the Lord President, and the peers generally can regard quarantine on these coasts and inland as in any true sense a protective measure against plague, or that an effective quarantine could be maintained in our ports, or that the attempt to impose one would be tolerated a month, we cannot believe. In fact, so far as quarantine is to be regarded as a protective measure, it is sufficient to say that its practical administration is carried out by the Customs—a department quite unprepared to exercise functions of preventive medicine, except in association with, and as aiding, the sanitary authorities of the coast, and wholly uninformed as to what prevention should consist in.

Now the value of the discussion at the Epidemiological Society was to bring into still clearer light the fundamental fallacy of the doctrines on which quarantine is founded, and also to show upon what kind of measures our actual safety in regard to plague must depend. The conditions of the dissemination of plague in Mesopotamia detailed by Dr. DICKSON (as we described them last week) prove that it is to our internal sanitary regulations, and not to external precautions, that we have to look for our defence. The results of the observations of Dr. CABIADIS, as stated by Dr. DICKSON, agreed with the results of the observations of previous observers since the reappearance of the plague, with the conclusions of the Plague Commission of the French Academy of Medicine, and, as was shown in the course of the meeting, with the results of experience even during the Great Plague in London in 1665. This large body of evidence furnishes a practical demonstration of the wisdom of the British Legislature in developing during the last quarter of a century our internal means of protection against infectious diseases, whether of home or foreign origin, and suffering quarantine measures to fall into disuse for public health purposes. It was clearly the general feeling of the meeting that any revival, or apparent revival, of quarantine which would distract the public mind from the real measures of precaution upon which the United Kingdom has to depend for safety might be productive of most disastrous results. The condemnation which Sir JOSEPH FAYRER pronounced upon quarantine obviously reflected the feeling of the Society, and the observations of Dr. WILKS, Dr. CADDY, R.N., Mr. NETTEN RADCLIFFE, the President, Surgeon-General JOHN MURRAY, M.D., and others, tended to confirm the conclusion that our safety rested in the completeness of our sanitary arrangements and administration, not merely in our ports, but in the kingdom generally.

IN bringing forward the Army Estimates, Colonel STANLEY informed the House that the health of the Army during 1878 had been very good. "There was one exception, he must frankly admit, in the case of Cyprus, where there had been a most unusual amount of disease." It would have been well, we think, had he contented himself with this statement, as the House would have acknowledged the special circumstances under which the island was occupied to have been, perhaps not a justification, but an explanation, of this unhealthy condition. But the gallant Colonel proceeded to tone down this admission, and in doing so made some statements which cannot be passed unnoticed. He said that, though the admissions were very high, the death-rate was not so. Now we do not know what Colonel STANLEY considers a high rate of mortality, but when we find the proportion of deaths to strength exceed by four times that which occurs among troops at home, not much under double the rate among those in India, and considerably over double the proportion in any of our colonies, Mauritius alone excepted, we think we may fairly demur to his statement. These comparisons, it may be observed, are not made on the results of some exceptionally healthy year, but on the average of the ten years 1867–76, as given in the volume on the Health of the Army just presented to Parliament by Colonel STANLEY. But let us examine still further the statistics which he adduced in support of his opinion of Cyprus. He stated that, "although Cyprus had been a good deal before the public, and the state of health of the troops had challenged attention, still there were many places in the various commands where the normal state of health was unfortunately less satisfactory than at Cyprus," but he omitted to name any such, and we have failed to trace them in the volume above noted. "The annual ratio of admissions per 1000," he continued, "in Malta was 1090, in Gibraltar 848, in Bengal 1979, in Madras 1562, in Bombay 2498, and in Cyprus the admissions were 4298; but when they came to the death-rate, even in the worst months of the year, Cyprus was very slightly in excess of other stations. The death-rate was stated at 37·27 per 1000; while Bombay stood at 35, and Bengal at 43." Now from what source Colonel STANLEY obtained these figures, or to what precise period they refer, we are unable to say. But the ratios given in the Report on the Health of the Army, calculated on the average of the ten years 1867–76, furnish results widely differing from them. Thus, the ratio of admissions is there stated—for Malta 806, Gibraltar 662, Bengal 1464, Madras 1245, and Bombay 1376; and the ratio of deaths for Bombay 17·24, and for Bengal 23·75 per 1000; and it must be

remembered that these ten years include several severe epidemics of cholera in both presidencies. These ratios differ so much from those quoted by Colonel STANLEY that some explanation appears desirable on the subject. Having thus shown that, according to his view, Cyprus is by no means so black as she is painted, Colonel STANLEY proceeded to point out, by the results obtained in other colonies, how much might be effected there by sanitation, and in this, again, he was unfortunate. "In the Mauritius, prior to 1857," he said, "the admission-rate was 815 per 1000, and the death-rate nearly 40·95; but sanitation at the Mauritius had greatly improved the health of the troops." On referring to the report already quoted, we find that in 1877 the admissions amounted to 2326 per 1000, and the deaths to 23·51—a very remarkable instance of improvement in the health of the troops, shown by the admissions having been nearly trebled! He also adduced the considerable reduction in sickness and mortality which occurred in the Ionian Islands between 1817 and 1863. No one who knows anything of the subject will question the great improvement effected by sanitary measures in the health of the army during the past half century, but we do not quite see its bearing on the question of the very unhealthy condition of the troops in Cyprus last year. Immense progress has been made during the same period in the prevention of disease, and it would have been more to the point if Colonel STANLEY had shown how far the knowledge acquired in this important branch had been brought into operation, and with what results. It would have been much more judicious on his part to have accepted the fact of the unhealthiness of the force last summer, and, instead of endeavouring to extenuate it, to have stated what measures have been taken, or are now in progress, to prevent a recurrence of this unhappy condition during the coming hot season. We agree with him in the opinion "that the sanitary state of the island may be brought fully to equal, if not surpass, other Mediterranean ports"; but to effect this will require a liberal but judicious expenditure in providing suitable quarters, clothing, and food for the troops, in draining the vicinity of their quarters, planting belts of trees, removing all local nuisances, and procuring an abundant supply of good water. Unless these things are done before the hot weather sets in, we may expect a repetition of last year's sickness, and a complete overthrow of Colonel STANLEY'S good hopes for the island.

Annotations.

"Ne quid nimis."

ARMY MEDICAL DEPARTMENT.

COLONEL STANLEY has at last given some indication of his intentions with regard to the Army Medical Department. In his speech on the Army Estimates he declared his adherence to the general hospital system, and stated that it was proved to the satisfaction of the highest military authorities that it was impossible "to retain the advantages of medical officers being attached to regiments" while carrying it out. He proposes, however, to try whether certain of the station hospitals could not be taken up by officers attached to regiments, and "whether it would be possible to attach for two or three years officers who, whilst moving about with regiments, could assist in performing general hospital duties at the stations wherever they might find themselves quartered." This is an attempt at a compromise which, we feel satisfied, will share the usual fate of such measures and break down. It is likely that the "very few" medical officers who are to be affected by it will be the first to complain of injustice, and it will also probably involve such additional cost as will induce the Secretary for War to avail himself of the reservation with which he has guarded himself on this point. He holds out anticipations that, when the numbers of the Department are again up to the establishment, exchanges will be more readily sanctioned, and that medical officers will be kept longer than heretofore at the same station. He foreshadows an increase of pay by stating that "he had not in the Estimates taken the full amount that would be necessary to meet the requirements of the Medical Warrant," and alludes to some matters requiring careful investigation, such as accepting the nomination of collegiate and other bodies. It will be seen from this summary that, with the exception of the decision in favour of the general hospital system, the prospective changes are still of a very hazy description. Colonel Stanley concluded his remarks on the Medical Department by saying that, "although the matter was one of great urgency, it was one in which he was obliged to be careful in ascertaining the facts and figures; but he was not without hope he might be able to get the assent of the authorities to the issue of the warrant before the next examination, which would be in August." So that, after having had the report of Lord Cranbrook's committee before him for six months, Colonel Stanley will require five months more before anything can be done to bring this important department again into a state of efficiency! We know that he had great difficulties to contend with from being new to the work of War Minister and from the pressure on the War Office caused by the occupation of Cyprus, but he can scarcely have realised the urgency of the case and the pressing necessity for medical officers or he would ere this have come to a decision upon the various questions involved in the reorganisation of the department, and have obtained the sanction of the Treasury to carry out the necessary measures. We are now to have a further delay of five months, and as the candidates will then have to pass through the course at Netley, eleven months will elapse before the first batch of officers will be ready to be gazetted.

CONTAGIOUS MISCONCEPTION.

ON the 27th ult., in the House of Lords, occurred one of those curious instances of misconception spreading from one individual to another, which occasionally make the psychologist fancy lunacy must be contagious. The Earl of Carnarvon, a statesman long remarkable for taking the strangest and most untoward views of facts and policy, found occasion to embody a singular congeries of errors of comprehension in a sentence reported as referring to a meeting of the Epidemiological Society held the previous evening, as follows. Speaking of the plague:—"He (Lord Carnarvon) shared in the desire expressed by all those authorities not to create alarm; but, at the same time, he thought that every precaution which prudence might suggest ought to be taken to preserve the country from a visitation of the pestilence." He observed, however, that one speaker at the meeting, who was connected with a Government department, attached so little importance to the presence of the plague in, or its absence from, England, that he would, on the whole, prefer that there should be one or two cases here in order that they might form the subject of scientific investigation, and hoped the Government would keep them-

selves clear of all the nonsense of quarantine"; and more to the same effect. To this wondrous farrago the Duke of Richmond followed suit thus:—

"As to the speech to which his noble friend had more particularly called attention as having been made by a gentleman connected with a Government department, he hoped he would not be regarded as wanting in courtesy if he declined to endorse all the opinions of that gentleman, supposing him to have been correctly reported. From the statement of his noble friend that gentleman was reported, in the first place, to have said that he would not object to one or two cases of plague occurring here in order that they might be scientifically considered. He thought it would have been much better of the gentleman not to have said that. Few people would agree with him in his desire. His next statement was that he hoped the Government would keep clear of the nonsense of quarantine. To that he could only say that quarantine in certain cases was part of the law of this country, and so long as it remained so and he continued to fill the office of President of the Privy Council, he would see that quarantine was effectually carried out."

If we are not greatly mistaken very much the same sort of confusion, worse confounded, occurred when the immortal Jenner enforced the need and sufficiency of vaccination as a protection against small-pox! It is needless to say the "gentleman connected with a Government department" neither said nor implied anything even approximating to the nonsense attributed to him, and which the ex-Secretary for the Colonies and the Lord President of the Council bandied across the gangway to the scant edification of the House of Lords or the country. What was said amounted simply to an expression of entire confidence in the sufficiency of our Public Health Acts to meet the difficulty, supplemented by the remark that if isolated cases of plague *did* occur this would have the effect of rousing the attention of the Privy Council and the local authorities to the urgent need of enforcing the provisions of the Act with more uniformity and greater faith in their value. No man in his senses wishes for plague, but it is satisfactory to find "a gentleman connected with a Government department," who happens to have a more perfect acquaintance with the nature and spread of plague than any other living authority, expressing—in a meeting of his medical brethren—full confidence in the sanitary measures within reach of the community to arrest the progress of plague should it unhappily appear in our midst. And those who have any actual experience of the farcical provisions upon which the old quarantine law relies exclusively will be further rejoiced to know that an energetic protest has been entered against the impolicy of reposing trust in measures of exclusion, which have always broken down before, and must break down again.

THE MEDICAL SOCIETY OF LONDON.

THE annual general meeting of the Medical Society of London was held last Monday (March 3rd) under the presidency of Mr. Erasmus Wilson. The report of the Council was read and adopted. Silver medals were given to Dr. C. T. Williams for special services as librarian, and to Mr. John Astley Bloxam, the retiring secretary, for special services as honorary secretary. The Fothergillian medal was not awarded this year, the adjudicators having pronounced that the essay sent in, although good, did not come up to the required standard. The subject selected for the Fothergillian prize essay for 1881 was "On the Relative Value of the various Antiseptics in their Relation to Medicine and Surgery." The financial condition of the Society was very satisfactory.

The following is the list of new officers elected:—President: Dr. John Cockle. Vice-Presidents: Sir Joseph Fayrer, Drs. Clement Godson and C. Theodore Williams, and Mr. W. F. Teevan. Treasurer: Mr. Thomas Harvey Hill. Librarian: Mr. H. Royes Bell. Secretaries-in-Ordinary: Dr. F. de Havilland Hall and Mr. D. H. Goodsall. Secretary for Foreign Correspondence: Dr. T. S. Dowse. Council: Drs. Percy Boulton, T. Lauder Brunton, W. H. Day, John Lowe (King's Lynn), Gilbart Smith, Heywood Smith, J. C. Thorowgood, Joseph Walker, and Alfred Wiltshire, Messrs. William Adams, J. Wickham Barnes, J. Astley Bloxam, Thomas Bryant, G. C. Coles, A. E. Cumberbatch, Francis Mason, William Rose, H. E. Sewill, Erasmus Wilson, and J. C. Wordsworth.

The meeting then resumed its ordinary business, Mr. Bryant reading an interesting paper upon the Treatment of Inflamed Bone by Operation, advocating early interference by drilling and trephining into bone the seat of chronic inflammation; by trephining or free incision into bone the seat of suppuration; and, thirdly, upon the value of free incision in cases of acute periostitis and endostitis. In all cases great relief from pain was at once established, and such operative measures also did good by relieving tension, even when suppuration was not present. The frequent supervention of blood-poisoning in acute cases when left unchecked was another argument in favour of these measures. In the course of the debate that followed, Mr. Lister expressed himself strongly in favour of operative interference which, with the aid of antiseptic precautions, might be carried on to a wide extent in the treatment of inflammatory and suppurative disease of bone and joints, and with the best results. Mr. Royes Bell, Mr. Gould, and others spoke, all the speakers being in favour of the measures recommended by Mr. Bryant.

THE CASE OF JOHN NOLAN.

THE Home Secretary may doubtless have reason for delaying the publication of the report of the Medical Committee appointed to inquire into the death of John Nolan in the Clerkenwell Prison last November. The report has now been in his hands for more than three weeks; but, surely, if the contents are of a nature to exonerate the prison officials from the severe censure passed on them by the jury at the inquest, it would be only an act of simple justice to them to publish the true facts as speedily as possible. On reading over the published depositions of the witnesses who gave evidence at the inquest, it is obvious that an inquiry was urgently called for. It certainly seems extraordinary that a man who had been sufficiently ill to be in the convalescent ward on Sept. 3rd should, on Sept. 7th, be put on bread and water punishment for two days. This punishment seems to have been repeated on Sept. 19th and 25th, and again on Oct. 1st, 5th, 7th, and 10th. On Oct. 9th he was punished with seven days' plank bed. On Oct. 25th he was sent into the infirmary. The medical officer states that the prisoner's legs were slightly swollen; the evidence, however, does not elicit what the nature of the swelling was. Again, the medical officer states, "I think the change in the temperature is sufficient to account for the congestion of the lungs." "The cells are all warm." "I consider a cold cell better to sleep in than a warm one." This is evidence which certainly requires explanation, for, as it stands, it is apparently contradictory. Congestion of the lungs does not usually attack healthy young adults, unless determined by some powerful exciting cause. Mere change of temperature would hardly occasion it, unless there were some predisposing condition. Did such a condition exist? Were the swollen legs and incontinence of urine due to an asthenic condition recognised sufficiently early to put a stop to the punishments of bread and water and plank bed before irremediable mischief was caused by them? Finally, supposing the prisoner is shown to have been a fairly healthy man, what was the nature of the "change of temperature" that, according to the medical officer, in "warm cells," caused the fatal congestion of the lungs? We look anxiously

to the report of the committee to solve these questions. It is probable that they have sifted the matter more completely, and have enabled the prison authorities to explain statements more fully than was the case at the inquest. If so, the public will be rejoiced to learn that our prison management is not so unsatisfactory as the evidence produced at the coroner's inquiry led them to suspect. If mistakes have occurred, however, it will be satisfactory to learn that the errors have been pointed out, and that steps have been taken to prevent their recurrence. Whatever may be the issue, prisoners and prison officials will gain by the speedy publication of the report.

PEMMICAN.

AFTER the favourable evidence adduced before the "Arctic Scurvy Committee" as to the nutritive value of pemmican, we have often felt surprised that medical men have not seen the advantages to be gained from its employment as a diet in cases of exhaustion, and in certain chronic forms of wasting disease. According to Professor De Chaumont, pemmican contains 35 per cent. of albuminates, 55 per cent. of fats, and yields per ounce 275 foot-tons of energy, as compared with dried bacon, 8 per cent. albuminates, 73 per cent. fats, 291 foot-tons; and with lean meat, 20 per cent. albuminates, 35 per cent. fats, 55 foot-tons energy. It has also nearly double the force value of oatmeal, which is considered as a typical article of nutritive food. Two objections have, however, probably militated against its introduction: first, its peculiar taste; secondly, the difficulty of procuring it. No pemmican can now be got in London; the Hudson's Bay Company, who used to import it, have given up doing so for two or three years. With regard to the first objection, general testimony concurs in showing that the dislike to the food shortly passes off. The disagreeable taste, however, might be altogether avoided by a more careful method of preparation, the unpleasant twang being no doubt imparted by the oak sawdust used in drying the meat, and, perhaps, in many instances, aggravated by rancidity of the suet employed in mixing the ingredients. Drying the meat is, of course, a necessity where pemmican is used for sledge journeys, as a portable food, in order to reduce its weight, but that process would not be required when it was used as an article of diet for invalids. Indeed, the mixture would be a most convenient vehicle for administering raw meat, and would be found more palatable and manageable than "raw beef sandwiches," or that unpleasant mixture of "raw pounded beef and cream." Children would soon learn to regard pemmican, when æsthetically prepared, as a very tolerable form of "mincemeat."

THE NATURE OF INFLAMMATORY ŒDEMA.

O. LASSAR has investigated the interesting question whether the swelling observed in inflammation, and which undoubtedly depends on increased transudation, is due to arrested or obstructed absorption, or to augmented velocity of the lymph-current. He established acute inflammation in the hind foot of dogs, and introduced cannulæ into the greatly dilated lymphatics accompanying the vena saphena parva. Prior experiments showed that in the normal condition not more than from two to four cubic centimetres were discharged from these vessels, whilst from the inflamed leg twenty to forty or more cubic centimetres were discharged. The increase of the lymph-current was not referable to the pressure of the exudation at the injured part, since, if the cannula were inserted before the establishment of the inflammation (induced by dipping the leg into hot water), the augmentation occurred before any exudation could be supposed to have taken place. The inflammatory lymph differed from arrested-circulation lymph, such as accumulates in a lymphatic around which a tight ligature has been cast, with previous section of the sciatic nerve. The former is yellowish, tenacious, coagulates immediately after being withdrawn from the body, contains a few red and a large number of white corpuscles, and on desiccation leaves a residue which is much greater than that of normal lymph, and many times more than that obtained after obstruction of the venous circulation. The latter is thin and watery, and coagulates slowly and imperfectly. The morphological elements are few, and consist chiefly of red with a few isolated white corpuscles. The characters of inflammatory lymph are preserved, even after its passage through a lymphatic gland. The density augments with the duration of the inflammation. In necroti: inflammations the lymphatic secretion disappears entirely. All these circumstances, Lassar is of opinion, are opposed to the views of Arnold, that a diapedesis and emigration of blood-corpuscles takes place through pre-formed stomata, since it is inexplicable that the presence of inflammation should lead to the passage of completely different saline and albuminous materials through the same pores as those which traverse these pores in arrested venous circulation. In inflammation changes must take place in the vascular walls which affect the process of diffusion. The facts given by Lassar have a practical application, since, if the fluid obtained by puncture has a high degree of concentration, it may be surmised that it is the result of an inflammatory process. It must be borne in mind, however, that in high degrees of spanæmia even the inflammatory lymph may be very watery.

THE OXFORD CORONER.

IT is satisfactory to be able to state that Mr. Hussey, the coroner for the City of Oxford, has apologised in the most ample terms to Mr. Horatio Symonds, for having issued a warrant for the arrest of that gentleman, on the occasion of his neglecting to obey the coroner's subpœna. Our readers will remember that Mr. Hussey pursued the unusual course of requiring the attendance of the consulting officer instead of the house-surgeon, to give evidence at inquests held on the bodies of patients dying in the Radcliffe Infirmary, and that Mr. Symonds took the independent course of refusing to give in to the coroner's whim. Thereupon Mr. Symonds was arrested, and this gentleman very properly commenced an action against the coroner; but the action has been stopped by the coroner's apology, and his payment of the preliminary legal expenses, amounting to £20. This sum Mr. Symonds has most generously handed over to the committee of the Radcliffe Infirmary. Mr. Symonds deserves the thanks of the profession for so boldly resisting a line of conduct on the part of the coroner which, if it had been allowed to go on unchecked, must have proved in the highest degree vexatious to the medical officers of the Radcliffe Infirmary. Mr. Hussey's apology is printed in the *Oxford Times* of last week.

THE AFGHAN CAMPAIGN.

THE general lull which there has been for some weeks in the active operations of the Khyber and Khurum forces, interrupted only by small expeditions against villages harbouring hostile tribes in the immediate neighbourhood, has been taken advantage of by the Medical Service to consolidate the arrangements and working of the field hospitals. The wounded of the Khyber column are reported as doing well, and up to date the sickness was moderate. The 81st Regiment have suffered severely from fever contracted prior to the war in the Peshawur Valley, and were under orders to return to Rawul Pindee. At Jellalabad the field hospital consists of two wings or sections, ready at any time to separate, each complete in itself. Six medical officers are attached for duty; medical stores, appliances,

and equipment are abundant. The tents in use are of three patterns, known as "European Privates," "Staff-Sergeants," and "Lascar Pals." The former, though heavy for transport, are admirable for fixed depôts, and, as the hot weather comes on, will afford more protection from the sun. Should the army advance to Cabul in the spring, the lighter description will be utilised for the movable field hospitals.

At Peshawur the base hospital for natives was very full, over 400 sick the last week in January. There was some deficiency of medicines and supplies, but steps were being taken to remedy this evil.

HEALTH OF BRITISH SEAMEN ABROAD.

DR. JOHN PATTERSON, surgeon-superintendent of the British Seamen's Hospital at Constantinople, gives, in the *Nautical Magazine*, under the above heading, some interesting notes on the cases that have come under his care at that establishment, which is one of the best British out-lying hospitals in Europe, and, as to its uses, very analogous to our own Dreadnought Hospital at Greenwich. It appears that during the past year 1921 patients were treated—i.e., 426 in- and 725 out-door; at a total cost per man per day of 3*s.* 6½*d.* In consequence of the foul state of the public sewers at Galata, where the hospital is situated, it was found necessary to have the drains of the building completely detached. Contagious diseases have during the year been conspicuous by their absence, as also intermittent fevers, generally so common in this city. Dr. Patterson notices a peculiar form of disease developed on board the British steamers employed in conveying Russian troops, which appeared to be a "purely mephitic intoxication, due to the crude method of ventilation practised." More than half the crews of these vessels were, according to the report, brought into an anæmic condition, with general marasmus of body and glandular and intestinal engorgement. The mortality was trifling, but most of the men were so permanently weakened that they were sent home as convalescents. Syphilis is still a very prevalent disease among sailors at the port, and the reporter thinks that this as well as other diseases are much aggravated afloat by want of personal cleanliness, for which, even on board the best steamships, no provision is made. The report thus concludes:—

"I think it my duty to state these facts and opinions for the information of Her Majesty's Government, with a view to future legislation on the subject, as, more or less, for twenty years my duties have brought me into close contact with seamen, and I have been struck with the marked deterioration in physique and greater proneness to certain forms of disease, especially since the introduction of screw steamers into the Levant and Black Sea trades."

It is to be hoped that the attention of Lord Sandon will be directed to this valuable report, as his lordship is about to bring in a Bill relating to seamen—a measure long promised, and, as to sanitary matters, very much required.

ECONOMIC DIETARIES.

THE economic feeding of the lower classes of our population, especially during the present crisis in trade, when so many are either thrown altogether out of employ or have their wages considerably diminished, is a subject deserving the attention not only of the philanthropist, but also of the statesman and man of science. Unfortunately, however, this important and difficult question seems for the time to be abandoned as an exercise field for the hobby-horses of certain visionary enthusiasts, each one of whom believes he has discovered a universal food—a diet complete in itself, *teres, totus, atque rotundus*. The reverend gentleman who, as spokesman of a deputation of vegetarians, urged on the St. Pancras guardians the advisability of feeding the inmates of our workhouses with horse-beans instead of butcher's meat, should remember the old adage, approved by experience—"What is one man's meat is another man's poison." The employment on a large scale of the nitrogenous products of the vegetable kingdom, such as oatmeal, peas, lentils, and beans, as it is now the fashion to advocate, must be regarded at present entirely as an experiment, and their effect on different constitutions ought to be carefully watched. Oatmeal and beans have the reputation of being what is popularly called "heating food," and dog-fanciers object to the employment of the former on a large scale in their kennels on account of its producing cutaneous eruption. We also know that in the early days of our agriculture, when corn was scarce, the poor had to content themselves with bread made from "beanes, peason, otes, tares, and lintelles," and that in those days cutaneous affections were specially prevalent. The importance of carefully observing the effect of any new article of diet when largely consumed is illustrated in the case of the use of kassaree-dholl of India—the flour of one of the pea tribe (*Lathyris sativus*). This, according to Parkes, when used in too great quantities, produces constipation, colic and some form of indigestion, and paralysis. In Bengal, Dr. Irving found in some villages no less than 14 or 15 per cent. of the people paralytic from this cause.

SANITATION AT PEMBROKE.

WE have just received a copy of the very practical report recently submitted to the Local Government Board by Dr. Airy, who was instructed to go to Pembroke, and to examine into certain insanitary circumstances that obtain conspicuously in that town. We take the condition of Pembroke at the present time, as detailed in the report now before us, to be a fair sample of that in which many towns are, and are likely to be, until the local sanitary authority awake to a consciousness of their duties and responsibilities, and understand that, in spite of the ratepayers' groans and lamentations, it is cheaper in the end to prevent disease and diminish mortality than to cure the former, and let the latter remain at a normally, or abnormally, high percentage. The district under consideration consists of two portions, Pembroke and Pembroke Dock. The defects in the former may be thus epitomised. By far the greater number of houses have common privies, which, of course, require emptying at frequent intervals, and "it is rare to find a privy that is not a nuisance for want of emptying. Not a few of the dwellings are without any privy at all." A large portion of the houses have no drain at all, and the slops are thrown into the ash-pit, which is a mere hole dug in the ground outside the privy, and extending under the seat. As regards water-supply, the whole daily supply to the town district is variously estimated at from 8000 to 25,000 gallons, with a population of from 9000 to 10,000 persons, and of this about 1000 gallons are consumed for trade purposes by breweries and steam saw-mills. The quality is reported to be sufficiently good, but the supply is intermittent, and though there are some wells in various other quarters, these are for the most part strongly suspected of contamination, and a severe outbreak of enteric fever in the union was pretty distinctly traced to this source.

The town of Pembroke Dock occupies the slope of a hill about 200 feet high, and accommodates about 8000 persons. Reservoirs, evidently fed chiefly from the rainfall, supply from 13,000 to 28,000 gallons of water a day, but it is estimated that the inhabitants on the Government property, within which these reservoirs are situated, each consume a daily average of eighteen gallons. The supply is intermittent, and as to one, at least, of the feeders, there is risk of pollution. Public and private springs, wells, and roof-rain supplement the reservoirs; but the mode of collecting the rain is very unsatisfactory, no proper amount of attention being paid to the cleanliness of the tanks. The wells are also, as

a rule, near a privy, and there is little doubt that soakage from the latter occurs. As in the town of Pembroke, so in Pembroke Dock, there seems to be, practically, no drainage at all. Slaughter-houses exist, and are as conspicuous by their very objectionable presence as any sort of establishment for receiving cases of contagious disease is by its absence. We need not occupy space by detailing the recommendations that Dr. Airy considered advisable to record for the benefit of the Town Council of Pembroke. Local self-government is highly extolled as making the inhabitants of this our native land free and independent, as well as self-dependent. But the Public Health Act of 1872 has shown us that, at all events so far as sanitary matters are concerned, there are a good many Pembrokes in England and Wales, as well as an equal number of obtuse municipal councils. Under such circumstances, and with every prospect of their indefinite prolongation, is it is not natural to prefer a mild central despotism to a puerile "*dolce far niente*" system of local self-government?

THE VESTRIES AND THE WATER COMPANIES.

THE meeting of last week at St. Martin's Vestry Hall of the representatives of the metropolitan vestries to consider the question of the water-supply of the metropolis was an important step towards relieving the ratepayers from the caprice of the water companies with regard to charges, and also, we hope, a step towards ensuring a constant supply drawn from a purer source than is at present the case. The vestries are, after all, as representatives of the householders of their respective parishes, the proper bodies to commence the crusade against the arbitrary conduct of the monopolists, for if those directly concerned make no sign it can hardly be expected that a Government, conducted like the present on the *laisser faire* principle with regard to its home policy, and in sanitary affairs, will be expected to interest itself much in the question. During the last twenty years the rateable value of the metropolitan parishes has more than doubled, and the water companies must therefore have enormously increased their incomes in that period. But what have they done for the consumer in that time? The answer is—London is still without a constant supply, and what is supplied is mostly taken from a polluted source. The time has now arrived when the water companies should be made to share their increased gains, derived from the improved value of rateable property, with the consumers, either by making the desired improvements or by diminishing their charges.

THE GALLANT DEFENCE AT RORKE'S DRIFT.

ONE of the wounded men states as follows:—"After the niggers surrounded us we fought like tigers. I saw Dr. Reynolds (A.M.D.) blazing away at them, cheering the ones that were hit, running to the fellow, dressing his wounds, then fighting away like a hero. He and the Hospital Corps men defended the hospital to the last moment. When the Zulus got in they charged through them and got into the laager behind waggons and mealie bags, where they all fought like true Britons until daylight. They made several sorties, and drove them off splendidly." Surgeon Reynolds, writing the next day, reporting the loss of hospital stores, never mentions a single word about himself, but simply states, "I am glad to say that the men of the A.H.C. behaved splendidly; and I am almost certain that Lieutenant Hall, A.H.C., and several men were killed." They were with Dr. Shepherd. But for the magnificent defence by that one brave company, the victorious Zulus would have swept down upon Greytown, and would certainly have destroyed Helpmakaar, laying everything to waste before them.

THE "GRAPHIC" ON LADY-DOCTORS.

OUR artistic and generally sensible contemporary, the *Graphic*, exults in the proposal of a final adjustment of the lady-doctor question by the measure to amend the Medical Acts which has been introduced into the House of Lords by the Duke of Richmond. We are warned that if "those who have hitherto monopolised the calling will not soon give up the opposition, there is some danger that their obstinacy will be set down to some rather less lofty motive than a disinterested regard for the public well-being." This is a terrible threat; but how is the medical profession to protect itself from the impending evil? Women have deserted their legitimate province as nurses and ministering attendants on the sick, and with unfeminine feeling desire to obtrude into the domain of men as practitioners of an art which in its training and following often overpower even masculine sensibilities. It is not in our power to prevent the inroad, although we feel that in opposing the craze we should be doing womankind a high service. Nevertheless, we cannot waver on matters of principle. If there are to be "lady-doctors," the creation of the weird sisterhood must be the work of its own misdirected enterprise; we can neither aid the monstrous mistake of policy, nor cease to warn womanly women against its adoption.

THE HOSPITAL SUNDAY FUND.

A SPECIAL meeting of the council of this fund was held on Monday last, at the Mansion House, to consider Dr. Glover's proposal relating to tabulating certain statistics for the use of the council. Space will not permit us to do more than record that, after much discussion, Professor Marks proposed, and Dr. Saunders seconded, the following resolution, which was carried *nem. con.*:—"That in the opinion of this committee it is desirable that a certain portion of the information contained in the returns made to the Distribution Committee should be tabulated for the use of the council, and that it be referred to a committee of seven members to consider the form of the tabular returns and report upon the same to this committee."

THE METRIC SYSTEM.

SINCE we called the attention of the profession some three months ago to the great importance of introducing the metric system into medicine and pharmacy, we have continued to receive communications on the subject from various quarters, but especially from our transatlantic brethren, who seem peculiarly alive to the paramount necessity of at once adopting a change which is clearly inevitable. Charles Sumner said of the metric system that it comprised "universality, uniformity, precision, significance, brevity, and completeness," and characterised it as "a system of weights and measures born of philosophy rather than of chance." Dr. Edward Wrigglesworth, dating from the Metric Bureau, Boston, sends us a couple of leaflets, in which he states concisely the reasons why we should use the metric system, and what the metric system is. We are bound, he says, to introduce this system with as little delay as possible, for moral, intellectual, social, practical, philosophical, and professional reasons, all of which are clearly and forcibly stated. A table of equivalents of the metric and our ordinary weights and measures is also given, by which it appears that a grain is equal to six centigrams, a drachm to four grams, and an ounce to thirty-two grams. These tables are certainly useful, but it may safely be said that the metric system will never be generally used until we are enabled absolutely to lay aside and to forget the intricacies of "apothecary's weight." If a new edition of the Pharmacopœia were to be issued, with all the quantities stated in grams and cubic centimetres, the thing would be

done, and there would be no great difficulty in recasting the doses, so that the present grains and minims should be replaced by an approximate number of centigrams and cubic centimetres. There seems to be no object in having the precise equivalents of our present weights and measures. Why should we not forget them entirely and take five centigrams instead of the grain (the grain being really six centigrams), and five cubic centimetres (about eighty minims) instead of the fluid-drachm? A few shillings spent in the acquisition of metric weights and measures would do more for obtaining a practical grasp of the metric system than many hours or weeks of study devoted to equivalence tables with long columns of puzzling figures.

THE WINTER OF 1878-9.

IT does not require figures to prove that the winter of 1878-9 has been both long and trying to the public health. It is interesting, however, to consider how far this general impression is supported by the stern logic of recorded facts. It appears from the last weekly return of the Registrar-General that the mean temperature of the four past winter months (November, December, January, and February) at the Royal Observatory, Greenwich, was only 35·9° Fahrenheit. The mean temperature of the air during these four months was, therefore, rather less than four degrees above the freezing point of water, and was 3·2° below the average mean temperature for the corresponding four months in 100 years. So far back as 1849 no record exists of a similarly low winter temperature, the nearest approach to which was in the memorably cold winter of 1854-5, when the mean temperature of the four months ending February was equal to 36·5°, although the period included a severe frost of nearly six weeks' duration. The greatest deficiency of temperature last winter occurred in December and January; the mean temperature during these two months did not exceed 32°.

THE NAVY ESTIMATES.

THESE estimates have just appeared; they exhibit for the medical establishments at home and abroad a total expenditure of £67,030, or a net increase of £630 as compared with the previous financial year. Salaries and allowances on account of medical establishments at home cost £16,528; for those abroad £11,483. The establishments at home include an inspector-general at Haslar, Plymouth, and Yarmouth, a fleet-surgeon at Haulbowline and Dartmouth, and a staff-surgeon at Pulland, as chiefs at these respective places. The charges for medicine and medical stores amount to £75,710, or a decrease of £4020, but these include a variety of items indirectly connected with active service.

HEROIC CONDUCT OF ARMY MEDICAL OFFICERS.

THE following is the history of the sad death of Surgeon-Major Shepherd, as related by an eye-witness, Mr. Muirhead, Natal Carabineers:—"As Kelly and I were riding for our lives, the Zulus pursuing us, my companion—almost a boy, Trooper Kelly—staggered in his saddle, evidently hit. I stopped my horse to see what was the matter, and tried to support him, but I couldn't, and had to lift him off on to the ground. At that moment Dr. Shepherd came galloping past. I called out to him, and he dismounted to examine poor Kelly. After carefully examining him he called out, 'Ah! poor fellow; too late, too late.' I had just mounted my horse, and Dr. Shepherd was in the act of putting his foot into the stirrup, when some instinct warned me to look round. As I did so I saw an assagei coming straight towards me. I turned to the left in the saddle; at the same moment it passed close to my head, and, unfortunately, struck Dr. Shepherd in the side. He immediately fell, and I put spurs to my horse, and galloped off as hard as the horse could go."

INTESTINAL OBSTRUCTION.

IN all the recent discussions held at the Clinical Society on intestinal obstruction one point appears to have been, if not overlooked, at least not made the most of. We allude to the topographical position of the normal peritoneal folds or mesenteries and their fossæ, which these folds limit or marginate. Medical knowledge and usefulness would be much increased if greater importance were attached to this subject. Text-books on anatomy should give information with regard to these anatomical constants, also as to their relations to the surface of the body and hand in rectal palpation. The very unique case recorded by Mr. Bellamy at the Clinical Society last week, a report of which will be found in another column, shows the value of such knowledge in diagnosis and treatment.

CYPRUS.

AN officer's letter last week gives a good account of this now rather celebrated little island. The winter climate is described as delightful. The rainfall has this season been scanty; nevertheless, the nights are cold and the days most enjoyable. The garrison, which now consists only of the 1st Batt. 20th Regt., a company of Royal Engineers, and a few men of the Army Service and Army Hospital Corps, are remarkably healthy. Sir Garnet Wolseley has decided to send every available man to the new hill station on Mount Olympus for the summer months, where they will be hutted and made as comfortable as possible. Surgeon-General Sir Anthony Home, V.C., is expected to leave for England on the 31st, the diminished number of troops not requiring a medical officer of his rank to superintend them.

HOSPITAL SUNDAY AND HOSPITAL SATURDAY.

IN Burton-on-Trent there seems to be a healthy rivalry between these two funds. During the year 1878 £419 was obtained from the Hospital Sunday collection, and £566 from the Hospital Saturday fund. We should be very glad to see no feeling but such as the above between these two funds in any place. In the infirmary at Burton-on-Trent the services of each of the three surgeons are acknowledged in an honorarium of £50 a year.

THE recent Order of the Privy Council relative to milk-supply is, as was prophesied at the outset, quite unworkable. The Bucks Chamber of Agriculture, at their recent meeting, protested against its application, instancing the fact that if the Order were enforced in its integrity, no man who sold a quart or two of milk from his country farm, on account of surplusage, would be exempt from its operation.

DR. HARTLEY, one of the civil surgeons employed last year to do duty with the troops at the Cape, has arrived home from Natal invalided by an attack of sunstroke. Dr. Hartley accompanied the 24th Regiment on their ill-fated march to the front, and had reached Helpmakaar when he was struck down with the *coup de soleil* to which in all probability he owes his life.

AN "Adulteration of Food and Medicine" Bill will shortly be presented to the American Legislature. The draft of the proposed law was drawn up after a discussion on the subject by joint committees of the New York Academy of Medicine, the Medical Society, the Therapeutical Society, the College of Pharmacy, the Medico-Legal Society, and the Public Health Association. The Bill appears to meet with the approval of the medical profession

in the States. The question as to intent to defraud is not considered, it being held sufficient to establish the fact of adulteration to secure conviction. The term "medicine" comprises every article used for the preservation of health or the relief and cure of disease in man and animals,—antiseptics, disinfectants, and cosmetics coming within the category. It is proposed that the duty of prosecution shall be imposed upon a State Bureau of Health, which will cause action to be taken on the complaint of any consumer of an adulterated article.

WE may remind our readers that at the next meeting of the Pathological Society of London, on March 18th, the subject of Lardaceous Disease, its Anatomical Distribution and Pathological Relations, will come on for discussion. Members are invited to give notice of their intention to exhibit specimens or take part in the debate.

AN election of two members of Council in the Royal College of Surgeons in Ireland, in the room of Messrs. M'Dowell and Ledwich, deceased, took place last Tuesday. The following were the candidates:—Messrs. Brunker, Madden, Baker, Bennett, Meldon, Swanzy, and Stoker; the first and last-named gentlemen being successful.

INTELLIGENCE has been received of the death of Lieutenant W. Hall, Army Hospital Corps, at the battle of Isandula on the 22nd February. Mr. Hall was serving under Surgeon-Major Sheppard, and it is supposed was massacred at the same time. He leaves a widow and five children to mourn his loss.

WE are glad to hear that, at the recent meeting of the members of University College, Professor Erichsen was elected a member of the Council. Mr. Erichsen's extensive and practical knowledge of medical education will make his presence at the Council Board of great value.

WE regret to announce the death of Professor Sormenschein, one of the most accomplished chemists in Prussia. He died at the age of sixty-two, and was considered one of the best analysts in Germany.

THE anniversary dinner of the Medical Society of London will be held at the Criterion Restaurant, Piccadilly-circus, on Saturday, March 8th, at seven o'clock.

New Inventions.

A HAND AND FOOT SPRAY APPARATUS.

(BY MR. M. A. FROST, F.R.C.S.)

THIS is an apparatus for using carbolic-acid spray during operations without the aid of steam. The hand and the foot alternately work the instrument. Its cost is very moderate, and it is said that it can be used by anyone. We all know how soon the hand becomes tired of working a spray-producer. But here when the hand is tired the foot takes up the task, and the hand and foot alternately relieve each other. It has been used for all sorts of operations in the North Staffordshire Infirmary, and seems worthy of a trial. It can be carried and employed much more easily than the steam instrument, and is obviously handy for private practice, where it might not be so easy to get "the steam up." The instrument is made by the firm of Messrs. Salt and Son, of Birmingham.

STETHOSCOPE.

MR. W. H. BORHAM, of Halstead, sends us an ingeniously contrived stethoscope, made with a disc of thin skin at each end. The idea is based on that of the telephone, and it is believed that sounds will be conveyed from one disc to the other and to the tympanum with greater clearness than with the ordinary stethoscope. After many trials of the modified instrument, we must confess to retaining a preference for the ordinary form. But, at the same time, some improvements in the material of which the vibrating discs are composed might add to the utility of the new instrument.

ULSTER CAPE-RUG.

MESSRS. B. BENJAMIN & SONS, of Ulster House, Conduit-street, W., have introduced a cape-rug combining the advantages of a wrap for the knees and an Inverness cape. The rug forms the lower part or skirt of the garment, and the cape either falls behind or is readily raised and covers the shoulders effectually. The article is likely to prove of special value to medical men, affording a complete protection from the weather, and being easily adapted to either of its uses during a drive, while forming a handsome walking cloak for general purposes. It is a specialty of this firm to manufacture Ulster goods from undyed wool, the differences of natural colour being ingeniously utilised to form a pattern.

INJECTING APPARATUS.

DR. BELL, of Edinburgh, has designed, and the Glasgow Apothecaries' Company have manufactured, an appliance consisting of an india-rubber bag with long tube attached, which affords ready means of giving an injection either per anum or vaginam. The bag is simply raised to a level above that of the patient, and the fluid falls by its own gravity, the jet being in proportion to the height, weight, and quantity.

Dr. Rasch, of Finsbury, has devised, and Messrs. Tyke, of the City-road, are selling, a simple tube, of suitable material, with a heavy metal suction extremity, and a long vaginal injection-tube at the opposite end. The tube is immersed in a vessel of water or fluid of any kind, and, being firmly compressed while so immersed, and drawn over the side of the vessel, acts as a syphon, and discharges the whole contents of the vessel—which can of course be renewed—in the form of a continuous and easy jet. This arrangement is remarkable for its simplicity, readiness, and efficiency.

THE PLAGUE.

IT would appear to be tolerably certain that plague has disappeared from the Lower Volga, but Russia is full of rumours as to the occurrence of scattered cases of disease in various parts of the empire, and even a probable case is reported in St. Petersburg.

On the Lower Volga no new case has been reported for over three weeks, but the sanitary cordon is still maintained around the infected area, and, in view of the opening of the navigation on the Volga, arrangements are being made for completing the cordon on the river by an armed flotilla. The process of burning those villages, or such part of them as may have been decreed to be destroyed by fire, has already commenced; the cemeteries in which the dead from plague are interred are being covered with deep layers of quicklime and earth; and when cleansing operations and chemical disinfection are held to be requisite, these measures are being energetically carried ont. Much care is being given to destroying by burning textile materials found in the houses where the sick have laid. The Austro-Hungarian Commission are now within the infected area, and have entered upon their work. They have divided into two parties, one of which is engaged in examining the localities in which plague prevailed on the left bank of the

Volga, the other on the right. No case of disease has occurred since the Commission arrived on the Volga, so for the present it must be content with getting together such facts as it can relative to the recent outbreak, and studying the conditions, as far as this is practicable, under which it happened.

The cases of popularly reported plague in various parts of Russia are now becoming somewhat numerous. These cases have all been examined by special medical commission, which hitherto appear to have satisfied themselves that popular fear has mistaken diphtheria, or typhus, or other form of serious disease, for the plague. These reports are not, however, altogether reassuring. They betray an anxiety to show that the reported cases of plague are anything but plague, which does not give confidence.

The case reported from St. Petersburg is of particular interest, for it is averred that Professor Botkine is at issue with the official medical representatives of the empire and municipality as to its nature. This case is reported as follows:—On Feb. 26th a man presented himself among Professor Botkine's patients at the Michel Hospital under the following circumstances. The patient, aged fifty years, was the porter to the artillery school. On Jan. 27th he had an attack of feverishness. The next day a bubo appeared in the left groin, which suppurated on Feb. 22nd. Two days after there was another attack of feverishness, and in the course of the night following a bubo appeared in the right groin. On Feb. 25th, when Professor Botkine saw the patient, there was great feverishness, the temperature 39·2° C. (98·8° F.), pulse 120, respiration 24, and the skin covered with a minute petechial eruption. The general powers of the system not perceptibly affected. Professor Botkine expressed the opinion that the patient was suffering from a slight form of the Astrakhan disease. Acting upon this opinion, the local authorities proceeded to isolate not only the patient himself, but also all the persons with whom he has lived in contact in the artillery school, some forty eight in number.

The official medical men who have since examined the case have come to the conclusion that the affection is syphilitic, "malgré la présence de quelques taches sur la peau," and they insist especially upon the absence of all indications of "contagion" with regard to the sore. Professor Botkine, however, it is understood, still adheres to his first expressed opinion.

The Local Government Board has addressed a letter to port sanitary authorities, dated 19th February, pointing out the "grave responsibility" which rests upon them in being prepared with hospital accommodation and proper means for disinfecting clothes and bedding in view of plague.

Correspondence.

"Audi alteram partem."

THE CONTAGIOUS DISEASES ACTS.

To the Editor of THE LANCET.

SIR,—Having read your article of the 1st ult., and the letters which appeared subsequently on the above subject, and having during a long period of duty at Windsor paid particular attention to the working of the Contagious Diseases Acts, I venture to offer a few remarks thereon.

There is, I think, no place which affords such a striking proof of the efficacy of those Acts as Windsor does, and in order to present accurate statistics of their working, I believe it to be absolutely indispensable that a distinction should be made between cases contracted "in" and "out of" the district, for it is notorious, as you observe in your remarks, that many men contract disease while on furlough in London, and if no such distinction be made these cases go to swell the returns of the protected district, which is manifestly unfair. Indeed, my experience has been that fully two-thirds of the cases at Windsor are contracted out of the district. I must therefore beg to differ from Dr. Balfour as to the inadvisability of discriminating between these two classes, and am at a loss to understand how he could arrive at the conclusion he did as to the men's inveracity, which made him consider that such a distinction would be unreliable, as such an assertion would, I presume, at least require much personal experience of the cases; and instead of their being untruthful and wilfully misleading the police, as he asserts, I can fully endorse Mr. Myers's opinion that their statements can generally be relied on, and that they do all they can to assist the police in the detection of the woman.

It is, I think, most unfair, too, to instance Windsor as an example of the inefficiency of the Acts, as has been done by Mr. Stansfeld, M.P., and some of his co-agitators, by appealing to the Army Medical Returns, which show the entire number of cases in hospital irrespective of their origin, whereas the greater proportion of them are made up of cases transferred from London on the move of the battalion to Windsor, or are contracted in London previous to the change of quarters, and make their appearance after arriving at Windsor, or, as already pointed out, are contracted out of the district while the battalion is quartered there. As these moves take place twice a year, it may be seen how large a proportion of the cases may thus be accounted for, and how these returns might be made to misrepresent the actual facts.

If the Contagious Diseases Acts had to depend for their reputation on their working at Windsor alone, they would afford the most complete evidence of the great benefit they confer on the soldier, and instead of Windsor being, as it was before the Acts came into force, a perfect hotbed of syphilis, and gave a larger number of admissions than even London, it now presents the most striking contrast to the ravages which this disease causes among the Guards in the metropolis.

As an evidence of my opinion with respect to this subject, I may quote an extract from my annual report on the health of a battalion at Windsor in 1876, and since then further experience has strengthened my opinion:—

"Since the battalion has been stationed at Windsor there have been but very few admissions from these (venereal) diseases, and those which occurred were chiefly contracted out of the district. Only one case of primary syphilis was contracted in the district since the battalion has been quartered here. These good results are due to the excellent working of the Contagious Diseases Acts in operation here."

I am, Sir, yours obediently,

W. M. COLLINS, M.D.,
Scots Guards.

Grosvenor-street, March 1st, 1879.

THE NAVAL MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—Allow me to say that, in my opinion, it would be for the advantage of the service if the present Director-General were re-appointed for five years, provided he is willing to serve again. He is one of the best, if not the best, we have ever had, and is justly esteemed for his literary, scientific, and social qualities, as well as greatly honoured for his long service in the Arctic regions (five years), and also during the Russian war, while his ten years' tenure of his present office is sufficient to prove how highly he is appreciated by the Board of Admiralty. In short, the profession has never been so well represented before as in the person of its present chief, and no man living is so well acquainted with the working and requirements of the Medical Department of the Navy. It cannot be denied that the service is unpopular, but for that he is in no way responsible. The fine old line-of-battle ships and beautiful frigates of a former generation have passed away, and with them, to some extent and in a certain sense, I fear, the charm and romance of the Navy; while it is not improbable that the recent lamentable disasters on board the ironclads and other floating castles—I was going to say, monsters of the deep—may have had a deterrent effect on young medical men joining the service. It is to be hoped, however, that a sufficient number of young surgeons will be found patriotic enough to come forward to fill the constantly occurring vacancies in the hospitals and fleets; and let me assure them that the service offers many advantages, and is not so black as has been painted, being greatly improved since I entered it thirty-two years ago. But this by way of parenthesis.

It is absurd to say that because a man is sixty years of age he is unfit for the office of Director General for another five years' term of service. Should Sir A. Armstrong wish

finally to retire, the name of Sir W. R. E. Smart, K.C.B., occurs to me as an officer highly qualified for that position, and justly entitled to consideration for his great professional attainments and long and valuable services. Should both of these decline, I recommend Dr. H. J. Domville, C.B., as likely to be a very efficient and popular Director-General.

Being now on the retired list, and having no personal object in view, I can speak fearlessly and independently; nor need I write under an assumed name, as some recent correspondents have done.

I am, Sir, yours faithfully,
JOHN ROSE, M.D.,
Staff-Surgeon R.N.

Chesterfield, March 3rd, 1879.

TRICHINÆ IN AMERICAN PIGS.

To the Editor of THE LANCET.

SIR,—In an annotation appearing in THE LANCET of Feb. 22nd, on Trichinæ in American Pigs, I notice the following sentence:—"There can scarcely be a doubt that the porcine race in the three kingdoms is just as likely to harbour trichinæ as on the Continent or in America, though they are never looked for or dreamt of as being present in swine's flesh."

The following paragraph of a paper I read at the Town Hall, Manchester, in June last, may, I think, be taken as evidence that medical officers do look for trichinæ as well as cysticerci in swine's flesh. Those who were present when my paper was read will remember that I showed a small piece of muscle containing these nematodes, and demonstrated how readily they might be made out by means of a good pocket lens:—

"*Trichinæ* in pork can usually be seen without the aid of a magnifier, the flesh being distinctly speckled. The white specks come out clearly if a thin section of muscle be treated for a short time with liquor potassæ and water (1 to 8), as recommended by Dr. Parkes. When the capsule is dense, the same author suggests the addition of a drop or two of weak hydrochloric acid. To see the coiled-up worm itself all that is necessary is a good pocket lens. These little nematodes, although they find their way to almost every organ of the body, do not grow or become encapsuled in any other tissue than that of the muscles. They are not like the cestodes enshrined between the fibres, but in the fibres. The muscles are swelled in consequence of the deposition of plastic material round each of the trichinæ, and the formation of the capsule. The cellular tissue is œdematous. The lungs are sometimes observed to be inflamed."

I am, Sir, yours, &c.,
FRANCIS VACHER.

Birkenhead, Feb. 26th, 1879.

MANCHESTER.

(From our own Correspondent.)

BRIGHT, open weather has succeeded to the late long-continued frost, and the Central Relief Committee has announced its intention of closing its extraordinary operations. Of course the permanent work of the Committee will continue as heretofore, and, in face of the general and extreme depression of trade, will find plenty of work to do; but the need for anything beyond this, it is now thought, has passed away. During the last twelve weeks of its existence the provisional committee disbursed a sum of over £22,000. With the warmer weather it is to be hoped that a better state of trade will commence, and more general occupation be procurable, but it must be confessed that the surroundings are very gloomy, and rather point to a long-continued period of distress and prevalent poverty.

The collection for Hospital Sunday in this city amounted to £4282, and for Hospital Saturday to £1152; making altogether £5434. This is a great falling-off from the collections of previous years, not amounting, indeed, to much more than half; but in face of the general distress, which affects rich and poor, it must be admitted that it speaks well for the warm heart of the people and for the popularity of the charities.

A vacancy has occurred in the medical staff of Owens College, owing to the resignation of Mr. J. Priestley, the assistant lecturer on physiology. Mr. Priestley, who for several years has been Professor Gamgee's right hand, will be sorely missed, as he was an excellent teacher and a very popular lecturer. He purposes, we are given to understand, spending some time in the laboratory of Professor Klein, with whom he worked in former years. The appointment of lecturer on Medical Jurisprudence has been filled by the election of Mr. C. J. Cullingworth, who for several years has filled the office of divisional surgeon to the police.

At the last meeting of the Medical Society Professor Watson read a learned paper on the Homologies of the Generative Organs of the Male and Female, richly illustrated with diagrams and specimens.

March 3rd, 1879.

PARIS.

(From our own Correspondent.)

THE increased mortality by typhoid fever in the barracks and lodgings of troops is the subject of much speculation amongst the army surgeons. At the large barracks of the Ecole Militaire, near the site of the late Exhibition, the epidemic of typhoid fever has been especially severe, although it is now beginning to diminish without the barracks having been evacuated. The main fact stated to be connected with the increased prevalence of typhoid in the French army is the presence of a much greater number of young soldiers in the ranks of the army as it is now organised. The soldiers do not remain so long in service, and a much more considerable number of youths are called into the ranks. On the other hand, recent statistics have shown that tuberculosis, which is rather a disease of the adult or old soldier, has comparatively decreased in the French army. There is no doubt, however, that other causes must be added to the main one which I have just mentioned, and one of the principal, as is acknowledged by recent writers here on the subject, is overcrowding. Undoubtedly the change from life in the open air to life in a city is of itself calculated to originate disease in the young French peasants, but it must be added that in very many of the dormitories the old regulations of 1839, allowing twelve cubic metres to each infantry soldier and fourteen to each cavalry man, and an interval of only twenty-five centimetres between each two beds, are still in full vigour. And then so few precautions are taken by the inmates to procure natural ventilation. Finally, there is the question of personal cleanliness. As long as the present rule, compelling the soldier to keep his arms and clothing bright and clean, but leaving him entirely free as to the use of soap and water, is suffered to exist, it is certain that there will not be that cleanliness in the army which ensures the individual health of the soldier and the good sanitary condition of the regiment.

Princess Murat, who died a few days ago, was carried off by an attack of intestinal obstruction. During several days every means employed failed to overcome the obstruction. It suddenly gave way, however, and her doctors indulged a faint hope; but this was of short duration, and the case ended in death.

I am glad to be able to give you better news of the health of M. Renan, the eminent historian and philologist. He has been suffering from a severe attack of gout, which has compelled him to keep his bed for the last fortnight, and caused the postponement of his public reception at the Académie Française. But he is now convalescent, and able to walk.

The subject of plague in the East has, of course, had its full share of attention from the public, the government, and the medical circles of this country during the last fortnight. It has especially been noticed in two interesting speeches, one at the Academy of Sciences, by Count F. de Lesseps, and the other at the Academy of Medicine, by the Inspector-General of Public Health of France, M. Fauvel. Both have created much sensation, and tended to reassure the public. M. de Lesseps, who has such considerable personal experience of the East and of plague, was quite decided in his conclusion that plague was not contagious, and that quarantine measures were useless and unadvisable. Such was not the opinion of Inspector Fauvel, who believed in the usefulness of proper preventive measures; and assured the auditory that they had all been taken in this country.

An experiment of considerable practical interest was performed a few days ago by MM. Labbé, Bert, Preterre, Lafont, and Regnaud, for the purpose of testing the practi-

cal applications of Professor Bert's researches on the anæsthetic properties of mixed nitrous oxide and oxygen *under tension*. You are doubtless aware of the character of M. Bert's researches, which were communicated to the Academy of Sciences in one of its recent sittings. But the experiment to which I allude was a practical one, applied to a human being. A chamber with compressed air having been prepared, the experimenters entered it with a young woman of twenty, who was to be operated upon for that most painful operation, in-growing nail. As soon as the barometer marked an increase of pressure equal to 0·17 centimetres, M. Preterre, the well-known dentist, applied the apparatus which he is in the habit of using. There was a sudden cessation of breathing, which lasted about fifteen seconds. Then a long inspiration followed, and after ten seconds there was complete insensibility. Dr. Labbé now proceeded quietly and leisurely with the operation, followed by the dressing. All this took about eight minutes, during which time the patient slept quietly, with a regular pulse, and a clear rosy complexion. On waking up she immediately felt the pain, and had a sort of short hysterical fit, with crying. But she declared when it ended that she felt quite well and very hungry, as she had not had anything yet to eat. The assistants were struck with the way in which she recovered her normal condition, as she was able to walk immediately and to resume her habits. The value of this anæsthetic mixture of about eighty-five parts of nitrous oxide and fifteen of oxygen, administered *under tension*, and discovered by Professor Bert, therefore promises to be very useful and practical. With this mixture, employed in compressed air, the patient does not get blue in the face, and the natural complexion, pulse, and breathing seem to be preserved. Moreover, it is not preceded by the period of agitation, which often proves so tedious and troublesome, and is not followed by the stage of reaction which often upsets a patient for several consecutive hours.

The Société de Médecine Publique has resumed its sittings. Dr. Bouley opened the winter session with an excellent speech, in which he referred to the assistance which veterinary surgery can lend to hygiene, and, amongst many good things, made the practical remark that it was most extraordinary that with modern veterinary regulations an epigastric disease could be arrested in any village, whereas it was impossible to exterminate even an epidemic of variola or typhoid fever. Dr. Galippe next made a communication, in which he related his observation of facts of transmission of syphilis through children's toys. The vendors in the streets and bazaars of Paris may be affected with syphilitic lesions of the mouth, and through the habit of practising on children's whistles and trumpets in order to attract attention, may possibly transmit the affection.

The banquet given by the medical body of Paris to one of their *confrères*, Dr. Ballay, who has made himself famous by his travels in Africa, came off with great *éclât* last week. Professor Rochard was in the chair, and made a very good speech. Dr. Ballay then related to an attentive auditory the history of his adventures on the African continent.

PARLIAMENTARY PROCEEDINGS.

HOUSE OF LORDS.

Thursday, Feb. 27th.

THE PLAGUE.

REMARKS by the Earl of Carnarvon and the Duke of Richmond and Gordon, on the meeting of the Epidemiological Society of London, held on the 26th inst.

HOUSE OF COMMONS.

Thursday, Feb. 27th.

THE PLAGUE.

Lord G. HAMILTON, in reply to Mr. Puleston, said—The Baltic will not be open before April. The Government have not thought it necessary at present to take any special precautions affecting the trade from Russia, but they have full powers under the Quarantine Act to do whatever may be found expedient for the protection of this country against plague, and will be prepared to exercise those powers should there be any danger of the disease approaching our shores.

Monday, March 3rd.

ARMY ESTIMATES.

Statement by the Secretary of State for War, and debate.

Medical News.

APOTHECARIES' HALL.—The following gentlemen passed the examination in the Science and Practice of Medicine, and received certificates to practise, on Feb. 27th:—

Jones, John, Redesdale-street, Chelsea.
Suckling, Cornelius Wm., Wheeley's-road, Birmingham.
Sweeting, R. Deane Roker, Atkins-road, Clapham-park.
Walker, Lawrence Newman, Tollington-road, Holloway.

The following gentlemen on the same day passed the Primary Professional Examination:—

John Sell Edmund Catman, Charing-cross Hospital; Arthur William Loveridge, Middlesex Hospital; Thomas Payton, Queen's Hospital, Birmingham; William Slater, St. Bartholomew's Hospital.

UNIVERSITY OF DUBLIN.—The following degrees were conferred on the 25th ult.:—

BACHELOR IN SURGERY.—West Whedale Wilson.
BACHELOR IN MEDICINE.—Benjamin Thos. M'Creery, Thomas Mason, West Whedale Wilson.
DOCTOR IN MEDICINE.—Robert Maude Maginniss, William Owen (*in absentiâ*).

MR. JOSEPH WILLIAMS, of Brentford, has been awarded a Government grant of £19 2*s.* for efficient vaccination in his district (second time).

THE West Ham Guardians have increased the salary of Mr. Frank William Cooper, medical officer of the Leytonstone and Wanstead District, from £50 to £100 per annum.

AT the annual meeting of the Governors of the Royal Surrey County Hospital, Guildford, it was resolved that the honorary consulting medical officers be in future *ex officio* members of the Committee of Management.

UNDER the influence, probably, of lower temperature, the death-rate of London last week rose to 25·5, from 23·7 per 1000 in the week ending February 22nd. There were 1771 deaths registered, 22 being attributed to small-pox, 21 to measles, 35 to scarlet fever, 8 to diphtheria, 50 to whooping-cough, 16 to different forms of fever, 19 to diarrhœa, 368 to bronchitis, 91 to pneumonia, and 62 to violence.

MR. THOMAS DOWLING having resigned as medical officer for No. 4 District of the Bedminster Union, the guardians passed the following resolution:—"That the guardians could not accept his resignation without expressing their sense of the value of his lengthened services, extending over a period of more than forty years, and especially recording their high approval of his unvarying kindness and attention to all the poor who came under his care."

A MAN found by the police in a state of drunkenness, lying over the body of his wife in a miserable hovel at Bristol, has been committed for trial on a charge of manslaughter. The woman was nearly naked; and after a post-mortem examination, Dr. Treharne is reported by the *Bristol Mercury* to have stated that her death resulted from disease, greatly hastened, if not entirely caused, by want of food. A perusal of the revolting details of this case may lead us to conclude that there is something very like barbarism nearer home than Zululand.

THE LATE MR. LEDWICH, OF DUBLIN.—At a special meeting of the students and medical staff of the Ledwich School of Medicine, held on the 27th ult., the following resolution was unanimously adopted:—"That the earnest sympathy and condolence of this meeting of the students and teachers of the Ledwich School of Medicine be presented to the representatives of Edward Ledwich, Esq., F.R.C.S.I., on the loss they and we have sustained by his demise."

A CENTENARIAN.—On Monday last the Rev. Dr. James Ingram, minister of the Free Church at Unst, Shetland, died within a month of the completion of his 103rd year, having been born in Aberdeenshire on the 3rd of April, 1776. He was licensed to preach the gospel in 1800, and was ordained a minister of the Church of Scotland in 1803. At the disruption he became a minister of the Free Church. The degree of Doctor of Divinity was conferred on him by the University of Glasgow in 1844. His son, the Rev. John Ingram, who is upwards of seventy years of age, and was ordained a minister in 1848, has been his assistant for a considerable time. The deceased's father lived to the age of 100, and his grandfather to the age of 105.

Medical Appointments.

ANGELL, Mr. A., has been reappointed Public Analyst for the Borough of Guildford, at £26 5s. per annum, and 2s. 6d. for each analysis and report.

BATEMAN, F., M.D., F.R.C.P.L., has been appointed Honorary Physician to the Norwich Lunatic Asylum.

BRISCOE, W. T., M.D., C.M., has been appointed Medical Officer of Health for the Chippenham Rural Sanitary District, at £100 per annum for two years, vice the Poor-law District Medical Officers, whose appointments have expired.

COLLIER, J. T., M.D., has been appointed Assistant Medical Officer to the Scarborough Friendly Societies Medical Association.

CULLINGWORTH, C. J., M.R.C.P.L., M.R.C.S.E., has been appointed Lecturer on Medical Jurisprudence at Owens College, Manchester.

DEVIS, C. J., M.R.C.S.E., L.S.A.L., has been appointed House-Surgeon to the Hereford General Infirmary, vice Moore, resigned.

DUCKWORTH, R. H. D'Olier, M.B. & L.M., L.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, &c., for the Borris-in-Ossory Dispensary District of the Donaghmore Union, Queen's County, at £100 per annum and fees, and £20 per annum as Medical Officer of Health, vice White, resigned.

HALL, S., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer of Health for the Lymington Urban Sanitary District, at £30 for one year, vice Chinery, resigned.

HARVEY, G., L.R.C.P.Ed., L.R.C.S.I., L.A.H.D., has been reappointed Medical Officer of Health for the Matlock-Bath and Scarthin-Nick Urban Sanitary District, Derbyshire, at £12 12s. for one year.

HOLBECHE, A. O., L.R.C.P.Ed., M.R.C.S.E., has been appointed a Resident Surgeon to the General Dispensary, Birmingham, vice Harmar, resigned.

JONES, R. A., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the Llanidan District of the Carnarvon Union, vice Owen, resigned.

LEVER, R. C., M.B., M.R.C.S.E., has been appointed Assistant Visiting Physician to the Margaret-street Infirmary for Consumption and Diseases of the Chest and Throat.

MACKENZIE, J. A., M.B., C.M., has been appointed Medical Officer and Public Vaccinator for the Parishes of Sleat and Strath, Inverness-shire, vice Campbell, deceased.

MALCOLM, J., F.R.C.S.E., has been appointed Medical Superintendent of the Shandon Hydropathic Establishment, near Glasgow.

MASON, S. B., L.R.C.P.Ed. & L.M., L.F.P.S.G., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the Blaenavon District of the Abergavenny Union, vice Ball, resigned.

MURRAY, A. D., M.B., C.M., has been appointed Certifying Factory Surgeon for the Rickmansworth District, vice Codd.

O'CONNOR, J. F., L.K.Q.C.P.I. & L.M., L.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, &c., for the Rahan Dispensary District of the Mallow Union, co. Cork, at £120 per annum and fees, and £10 per annum as Medical Officer of Health, vice Fitzgerald, appointed to the Workhouse.

O'ROURKE, C. T. J., L.K.Q.C.P.I. & L.M., L.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, &c., for the Ballinrobe Dispensary District of the Ballinrobe Union, at £100 per annum and fees, and £25 per annum as Medical Officer of Health, vice Twiss, resigned.

PLAYFAIR, D. T., M.B., C.M., has been appointed Assistant Medical Officer to the Royal Albert Asylum for Idiots and Imbeciles, Lancaster.

PROCTOR, R. F. S., M.B., C.M., has been appointed Medical Officer and Public Vaccinator for the Parish of Belhelvie, Aberdeenshire, vice McDonald, resigned.

REDMOND, J. M., L.K.Q.C.P.I. & L.M., L.R.C.S.I., Temporary Physician to Cork-street Hospital, has been appointed Assistant-Physician to the Mater Misericordiæ Hospital, Dublin, vice Gunn, resigned.

STONEY, J. H. L., M.D., F.R.C.S.I., has been appointed sole Lecturer on Anatomy at the Carmichael School of Medicine, Dublin, upon the resignation of Dr. Gunn.

URQUHART, A. R., M.D., has been appointed Assistant Medical Officer to the Warwickshire Lunatic Asylum, vice Sankey, resigned.

WILLIAMS, H., M.R.C.S.E., L.S.A.L., has been appointed an Honorary Surgeon to the Blackburn and East Lancashire Infirmary.

WOODS, J. F., M.R.C.S.E., L.S.A.L., has been appointed second Assistant Medical Officer to the Somersetshire Lunatic Asylum, Wells.

Births, Marriages, and Deaths.

BIRTHS.

GEE.—On the 26th ult., at Harley-street, the wife of Samuel J. Gee, M.D., of a daughter.

LEACH.—On the 22nd ult., at Werneth, Oldham, the wife of Abraham Leach, M.R.C.S.E., of a son.

MARTIN.—On the 21st January, at Darjeeling, Bengal, the wife of Surgeon John Martin, Army Medical Department, of a daughter.

RAVEN.—On the 25th ult., at Broadstairs, the wife of Thomas Francis Raven, L.R.C.P.I., of a son.

SANDERSON.—On the 23rd ult., at Wordsworth-street, Penrith, the wife of T. D. Sanderson, M.B., of a son.

MARRIAGES.

DOUGLAS—CHADDERTON.—On the 8th ult., at the Stowell Memorial Church, Salford, William Douglas, M.D., to Jane, daughter of William Chadderton, Esq.

SANCTUARY—MCDERMOTT.—On the 13th ult., at St. Mary's, Powerstock, Thomas Sanctuary, M.B., to Emily, daughter of the late Rev. John McDermott.

DEATHS.

ANDERSON.—On the 22nd ult., at Glasgow (suddenly), William Neilson Anderson, of Irvine, Surgeon, Royal Navy (retired).

BATESON.—On the 27th ult., at St. George's-road, Southwark, Henry Bateson, M.D., aged 63.

FENTON.—On the 20th ult., at San Remo, George Frederick Fenton, L.R.C.P.Ed., aged 25.

GODRICH.—On the 27th ult., at Fulham-road, Francis Godrich, jun., M.R.C.S.E., aged 50.

HOGAN.—On the 2nd inst., at Wentworth-place, Dublin, Edward Michael Angelo Hogan, L.K.Q.C.P.I., Surgeon, Army Medical Department, aged 26.

HOUSEMAN.—On the 24th ult., at Knaresborough, Edward Cooke Houseman, M.R.C.S.E., aged 42.

HYDE.—On the 1st inst., at Thorne House, Clifton, Edward Hyde, M.R.C.S.E., aged 68.

IRVINE.—On the 1st inst., George Richard Irvine, M.D., of Guilford-street, Russell-square, aged 40.

LAURIE.—On the 2nd inst., at Musselburgh, George Laurie, L.F.P.S.G.

LEACH.—On the 27th ult., at Moss Hall, Heywood, Jesse Leach, F.R.C.S.E., aged 66.

LISTER.—On the 1st inst., at Doncaster, John Lister, F.R.C.S.E., aged 63.

NICHOLS.—On the 24th ult., at Augusta House, Rotherhithe, George William Nichols, M.R.C.S.E., aged 50.

PRATT.—On the 10th ult., at Rothesay-terrace, Bute Docks, Cardiff, Alfred Septimus Pratt, Staff-Surgeon, Royal Navy, and seventh son of the late Charles Edward Pratt, M.D., and nephew of the late John Tidd Pratt, Barrister-at-Law, and Registrar of Friendly Societies.

TIBBITS.—On the 2nd inst., at Burfield House, Highgate, the beloved wife of Herbert Tibbits, M.D., of 30, New Cavendish-street, W.

WEMYSS.—On the 4th ult., at St. Andrews, Alexander Watson Wemyss, M.D., aged 79.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages and Deaths.*

BOOKS ETC. RECEIVED.

Messrs. BAILLIÈRE, TINDALL, & COX, London.

The Brain and its Diseases. Vol. I. By Dr. T. S. Dowse.
How to Prolong Life. By De Lacy Evans.
On Diphtheria. By Dr. R. H. Semple.
Rules of Medical Etiquette.
Materia Medica and Pharmacy. By W. H. Griffiths & Dr. G. F. Duffey.
Our Services under the Crown. By Surgeon-Major A. A. Gore.
The Nature and Treatment of Rabies or Hydrophobia. By T. M. Dolan.

Messrs. BAILLIÈRE ET FILS, Paris.

Leçons sur la Syphilis. Par V. Cornil.

Messrs. J. & A. CHURCHILL, London.

Notes on Rheumatism. By Dr. J. Pollock.

Messrs. KEGAN PAUL & Co., London.

The Evolution of Man. By Ernst Haeckel. Vols. I. & II.

Messrs. LINDSAY & BLAKISTON, Philadelphia, U.S.A.

Naval Hygiene. By Dr. J. Wilson.

Messrs. LONGMAN, GREEN, & Co., London.

Elementa Latina. By W. H. Morris.

Messrs. WARD, LOCK, & Co., London.

Facts about Champagne and other Sparkling Wines. By H. Vizetelly.

PAMPHLETS.

Opening Address to the Students attending the Aural Clinique in the Glasgow Western Infirmary. By Dr. T. Barr. (James Macklehose, Glasgow.)—The Recurrence of Nausea and Vomiting during the Latter Months of Pregnancy. By Dr. W. L. Richardson. (William Wood & Co., New York.)—On the Application of Nascent Oxygen to the Disinfection and Deodorisation of Wounds and Ulcerated Surfaces. By Dr. John Day.—Artificial Refrigeration of Ships and Merchandise. By John Gamgee.—A Series of American Clinical Lectures. Edited by Dr. E. C. Seguin. Vol. III. No. XII. (G. P. Putnam & Sons, New York.)—Report on Aconitia in Trigeminal Neuralgia. By Dr. Seguin. (D. Appleton & Co., New York.)—Suicide in its Social Relations. By Dr. J. G. Davey. (Baillière, Tindall, & Cox, London.)—On the Neglect of Physical Education and Hygiene by Parliament and the Educational Department as the Principal Cause of the Degeneration of Physique of the Population. By Dr. Roth. (Baillière, Tindall, & Cox, London.)—Sewage-Poisoning: its Causes and Cure. By Dr. E. T. Blake. (Hardwicke & Bogue, London.)—Medicinal Plants. By R. Bentley and H. Trimen. Parts XXXII. to XXXVII. (Messrs. J. & A. Churchill, London.)—Visiting List Temperance Charts. (Messrs. Harvey & Reynolds, Leeds.)—Cases Illustrating Two Rare Diseases of the Eyelids. By Dr. C. S. Ball. (Reprinted from the Transactions of the American Ophthalmological Society, 1878.)—Good Words; March. The Sunday Magazine; March. (Daldy, Isbister, & Co., London.)—Trichorexis Nodosa. By Dr. W. Whitla. (J. Falconer, Dublin.)—House and Home; March.—The Magazine of Art; March. (Cassell, Petter, & Galpin, London.)—The Gospel Magazine; March. (W. H. & L. Collingridge, London.)—The Contemporary Review; March. (Messrs. Strahan & Co., London.)—Insanity and the Lunacy Law. By Dr. W. Wood. (Messrs. J. & A. Churchill, London.)—Atlas of Histology. Part I. By Dr. E. Klein and E. Noble Smith. (Smith, Elder, & Co., London.)

METEOROLOGICAL READINGS.

(Taken daily at 8 a.m. by Steward's Instruments.)

THE LANCET OFFICE, March 6th, 1879.

ate.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb	Dry Bulb	Solar Radia in Vacuo	Max. Temp Shade	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Feb. 28	29·73	W.	41	42	..	49	32	0·06	Overcast
Mar. 1	29·98	E.	39	40	..	49	37	0·15	Cloudy
" 2	30·16	N.W.	44	49	..	50	32	..	Fine
" 3	29·91	WNW	37	39	..	47	33	..	Cloudy
" 4	30·14	WSW	36	38	..	51	34	0·03	Hazy
" 5	30·05	W.	47	49	..	54	36	..	Overcast
" 6	30·23	W.	39	42	..	54	38	0·04	Overcast

Notes, Short Comments, and Answers to Correspondents.

THE BIRMINGHAM LYING-IN CHARITY.

IT is now more than two years since the Committee and Governors of the old Birmingham Lying-in Hospital determined to change the character of the charity, and to devote its resources entirely to out-door work, and the institution is now known as the Birmingham Lying-in Charity. From the thirty-sixth Annual Report of the institution, recently presented to the governors and subscribers of the charity, it appears that the result of its work during last year was still more eminently satisfactory than in recent years. The midwives of the charity attended 969 patients during the year, an increase of 78 upon the cases attended in the previous year, and not a single death occurred among the mothers. During the ten years since the institution ceased to be a lying-in hospital, 9475 cases have been attended, and 29 deaths of mothers have occurred, equal to a mortality of but 2·1 per 1000, which is less than half the average rate of mortality among puerperal women in England and Wales. More than 4000 women die annually in childbirth in this country. Not only, however, is the mortality of mothers among the patients of a well conducted lying-in charity far below the average, but the proportion of still-born children is also very considerably lower than in lying-in hospitals. Of the 982 children born last year under the auspices of the Birmingham Charity, only 21 were still-born, equal to 21·7 per 1000, against 28·8, the average proportion in the ten preceding years. It is stated that only "nine infants died, being equal to 9·28 per 1000" born. This statement is not sufficiently explicit; for although we are told that "the state of health of every mother was ascertained thirty days after delivery," nothing is said as to whether the same means were adopted for ascertaining the health of the infants at the same date. Although we have often expressed a belief that lying-in charities might be made to exercise an important influence on the reduction of infant mortality, we cannot venture to believe that only 9 of the 969 infants born last year under the charge of the Birmingham charity died during the first month of their life. We know that, according to the English Life Table, the average mortality of English children during the first month of their life is 46·5 per 1000 born. On this point we could wish for more information in the reports of lying-in charities. It appears that the assistance of the honorary surgeons was required in 18, or rather less than 2 per cent., of the 969 cases last year. The total cost of each patient attended last year was only slightly more than eleven shillings; and bearing in mind the useful work of the charity and its economical management, we regret to observe that the contributions of subscribers are declining. This is a drawback to the successful operations of the charity, which we hope may disappear during the present year.

Juvenis.—The advice of a medical man should be sought in the case, and he will recommend the course to be pursued.

ON EXCISION OF THE ELBOW-JOINT, AND ON SUB-CUTANEOUS OSTEOTOMY BELOW THE TROCHANTER MINOR.

To the Editor of THE LANCET.

SIR,—In your issue of Feb. 22nd, Mr. Annandale, in a lecture on Excision of the Elbow, draws attention to what he believes to be the best incision, and points to the necessity of avoiding the transverse section of the muscles and fascia. He writes as though this method were unknown to others. It is but right to say that the value of this method was demonstrated by Mr. Maunder, at least ten years ago, in the theatre of the London Hospital. Patients thus operated upon can be secured, and have been shown at Medical Societies in London by Mr. Maunder with, active movements at the elbow almost as strong and as useful as those of the original joint.

Again, Mr. Norton performs at St. Mary's Hospital subcutaneous osteotomy of the femur with the chisel, and describes the operation originally performed by Mr. Maunder, and often repeated by that surgeon with great success, and without suppuration, but without associating that surgeon's name with the method employed.

London Hospital, Feb. 28th, 1879. E. VACHELL, House-Surgeon.

A MAIDEN REPORT.

THE following is a summary of the first Annual Report of the medical officer of health for Brownhills, Staffordshire (Dr. Flinn), for 1878:—"The public health of this district, on the whole, has been satisfactory during the year 1878. The births registered in the district during the past year numbered 468, giving a birth-rate per 1000 of the population of 42·6; the number of deaths registered in 1878 was 190, giving a death-rate of 17·3 per 1000 of the population. Diarrhœa and whooping-cough were very prevalent during the year. Zymotic diseases caused 24 deaths. In November last the district was threatened with an epidemic of scarlatina of a virulent type; but, owing to the measures that were taken for isolation and disinfection, the disease speedily disappeared. I cannot but refer here to the great want there exists in this and every other similar district of a compulsory registration of disease. An epidemic may be going on slowly for weeks unchecked, and until death takes place the medical officer of health may be in entire ignorance of its presence. It is a fact worthy of note that in the large district under the authority of the Board, and which comprises a large mining population of nearly 12,000 people, there has not been one fatal colliery accident during the year 1878. The highest mortality was amongst infants under one year old, which was in great measure due to malnutrition, the result of the employment of unnatural and unsuitable food."

Q. R.—The communication has been received, and will be inserted at the earliest opportunity.

Dr. P.—Gloves can be procured of the surgical appliance makers.

"PATHOLOGY: A TRADE."

To the Editor of THE LANCET.

SIR,—I cannot permit the letter of "F.R.C.S.," which appeared in your last number, to pass unnoticed. In that letter it is imputed to me as a professional crime that I prepare and offer for sale to the public slides of drunkard's liver together with slides of healthy liver for comparison. That I do prepare and issue such slides I frankly and without the slightest vestige of shame admit.

Nowadays the schoolmaster is indeed abroad. People are eager for information and instruction, and in no direction is this earnestness more manifested than in a desire for knowledge about the house in which they live. This knowledge *they have a right to*, and will obtain. All who own microscopes naturally feel this desire very keenly, possessing, as they do, such an efficient means of gratifying it. Hence they resort to the dealers for microscopical slides illustrative of physiology and pathology. These slides being prepared by men who for the most part have had no opportunity of acquiring professional knowledge, are frequently of such a nature as to be absolutely valueless for the purposes of study. If, therefore, to meet the rational and legitimate wants of the public, I have, at considerable expense and with much labour, produced for their use slides, not only reliable but *typical*, wherein have I offended either against morality or the dignity of the profession? That I have not been unsuccessful in my efforts, the many appreciative letters which I have received from both medical men and the laity sufficiently testify.

The most eminent members of our profession have not considered it derogatory to themselves to point out *to the public* the evils of intemperance, and to exhibit to them minute and detailed *word-pictures* of the physical ills to which it gives rise; yet because, following in the track of such men, I have endeavoured to demonstrate in a manner capable of being understood by the meanest capacity, the terrible reality and truth of *their* teachings, I am to be denounced for so doing.

In conclusion, Sir, I thank you for your able justification of the course I have pursued; and in order that you may fully see whether the slides really in any way offend against good taste, I take the liberty of enclosing you a pair, together with their accompanying explanation.

Yours faithfully,

St. Helens, Lancashire, March 3rd, 1879. SYLVESTER MARSH.

Mr. C. M. Scott.—Our correspondent should obtain the Rules and Reports of one or more of the best provident dispensaries—say that of North-ampton, Leicester, or Camberwell.

W. K. F.—The circular should be forwarded to the President of the College of Surgeons.

Dr. A. T. Thomson.—The paper is marked for early insertion

SMALL DOSES OF CHLORAL HYDRATE AS A HYPNOTIC.

To the Editor of THE LANCET.

SIR,—I judge from my own observations, contrasted with the recorded experience of others, that chloral hydrate, when given simply with the view of inducing sleep, is often prescribed in needlessly large doses. I have proved the power of very small doses both on myself and on my patients. I have been troubled for many years with a tendency to lie awake after sleeping for three or four hours, when, after courting the "dull god" in vain, sometimes for hours, I find that, nine times out of ten, four grains of the hydrate induces sleep in about ten minutes—a sleep which generally lasts for two or three hours, and is followed by no unpleasant symptoms whatever. I find the same results in many patients who merely suffer from nervous wakefulness, without pain or cerebral disease. I have found it invaluable in some cases of phthisis in an early stage. So small a dose, too, is perfectly safe in heart disease. I have succeeded better in the case of women than of men, especially if, like myself, they are not in the habit of taking alcoholic stimulants. Doubtless, if taken every night, this small dose would in time become inoperative. I have not taken it myself (nor recommended it to patients) on an average more than twice a week, sometimes with longer intervals.

I am, Sir, your obedient servant,

Margate, Feb. 1879. J. H. SMITH, M.R.C.S., &c.

INFANT MORTALITY IN NORWICH.

AMONG those counties which may generally be described as agricultural counties, Norfolk enjoys the unenviable notoriety of showing the highest rate of infant mortality. Among the twenty large English towns specially dealt with by the Registrar-General, Norwich holds a very similar position. During the nine years 1870-8 the deaths of infants under one year of age in Norwich have averaged 191 per 1000 of the births registered within the city; in other words, nearly 20 per cent. of the children born have died before completing one year of age. The average rate of infant mortality during this period in the twenty large towns was 174 per 1000 births, and in London the proportion did not exceed 160 per 1000. We would suggest to the Town Council, as the urban sanitary authority, and to the medical officer of health of the city of Norwich, whether this excessive infant mortality is not a fitting subject for careful investigation. There does not appear to be any satisfactory reason why of 1000 children born in Norwich, 191 should die under one year of age, or 31 more than of 1000 born in London. It is true that in a few of the manufacturing towns of Lancashire and Yorkshire, and in Leicester, infant mortality during the past nine years has even exceeded the high rate in Norwich; but as Norwich can scarcely be classed as a manufacturing city, small comfort can be derived from the fact that its rate of infant mortality is exceeded in such towns as Liverpool, Leeds, and Leicester; while, on the other hand, we have the example of Portsmouth, where the infant death-rate in the nine years in question did not exceed 144 per 1000. But to return to our comparison of the rates of infant mortality in Norwich and in London. The annual death-rate from all causes in Norwich during the nine past years has averaged 24·2 per 1000, while in London it was but 23·0; the annual death-rate from the seven principal zymotic diseases was equal to 4·2 per 1000 in Norwich, and 4·1 in London. It is evident, therefore, that, although a comparison of the general mortality statistics of Norwich and London is somewhat unfavourable to Norwich, the great excess of infant mortality in the latter city must be due to causes especially affecting infant life. It is noticeable that many other cathedral cities besides Norwich suffer from exceptionally high rates of infant mortality, among which may be mentioned Exeter, Durham, and Worcester.

M. B.—The matter is mentioned in another part of our issue.

SOUTHEY'S DRAINAGE-TUBES.

To the Editor of THE LANCET.

SIR,—I venture to think that a few particulars of the following case in which I used Southey's tubes may be of interest to some of your readers.

During February last, Mr. A——, aged fifty-one, of temperate habits, came under my notice, suffering severely from cephalalgia. The heart-sounds were perfectly normal, but the urine was slightly albuminous. The headache, which was very persistent, was eventually relieved by a mixture of bromide and iodide of potassium.

On the evening of June 15th I was sent for by Mr. A——, as he stated that his legs were swelling rapidly. I found that there was considerable œdema; and upon examining the chest, I was surprised to find a very distinct murmur (aortic regurgitant). The urine was now loaded with albumen, and scanty. Diuretics were administered, and the œdema somewhat subsided.

During September the dropsy became general, and the scrotum especially being distended and excoriating the thighs, I punctured the feet with a scalpel, the operation only partially relieving, and causing much pain.

On October 4th I saw my patient in conjunction with my friend Dr. De Havilland Hall, who suggested the following *rationale* of the case—viz., disease of the kidneys in the first instance, accompanied, as it sometimes is, with intense headache, and causing the secondary valvular disease. Muriate of iron with acetate of potash was ordered.

During the next month, the dropsy steadily increasing, the hands even being painfully affected, I determined to use Southey's tubes. At 12 A.M. I inserted with but little pain two of the tubes into the dorsum of each foot, leaving them firmly imbedded with about six inches of the rubber tubing attached, and requiring no further support to keep them in position. The feet were then placed in a foot-bath containing only warm flannels; and on visiting my patient at twelve o'clock next day, I was shown a large slop-pail full of the fluid that had been evacuated, and he expressed himself much relieved. During the next twelve hours a still larger quantity was drawn off, and that night he slept comfortably from eleven till two o'clock, when he awoke, suffering intense pain in the feet, and at once sent for me. Being unfortunately from home, I was unable to see him until half-past seven, when I found the running had entirely ceased, the skin being intensely hot and painful, and of a dusky-purple hue, the discoloration extending nearly to the knees. I at once removed the tubes, and ordered sambucus ointment to be applied on lint. The inflammation quickly subsided, and until December 13th he enjoyed comparative ease, when, pneumonia supervening, he rapidly sank.

In this case the tubes certainly proved very valuable; for by their means the dropsy was completely removed, and this result would have been obtained almost painlessly had they been withdrawn at the time the flow ceased. Yours faithfully,

G. T. PENNY, B.A., M.R.C.S.E., &c.

Rotherfield-street, Islington, Jan. 14th, 1879.

M. A. Christie.—The Handbook of Nursing, published by Lippincott and Co., of London and New York; Miss Veitch's work on Nursing, or Miss Nightingale's standard treatise.

Mr. Simeon Snell (Sheffield) should inquire at his hotel.

A SUGGESTION IN THE TREATMENT OF MORBUS COXÆ.

IN the *American Journal of Medical Science* for January last, Dr. J. C. Hutchinson, writing on the subject of hip-joint disease, advocates the following plan to obtain extension of the leg and to minimise the weight of the body:—On the shoe of the sound limb an iron sole is applied, three inches high, so as to raise the foot from the ground. When the patient now stands upon his crutches the diseased limb is suspended. It is claimed that by means of this apparatus all the indications for the mechanical treatment of hip-joint disease are fulfilled. Immobility is obtained, friction prevented, the extension made by the weight of the suspended limb relieves the inflamed parts from pressure and pain and overcomes deformity, while the patient has the great advantage of being able to take exercise in the open air.

K. A. P.—We regret that we cannot find space for our correspondent's letter.

PEROXIDE OF HYDROGEN.

To the Editor of THE LANCET.

SIR,—Your issue for the 8th of June last contains a leading article on the above subject, referring chiefly to the recent researches of Drs. Paul Guttmann and Ernest Schwerin, as reported in Virchow's *Archiv*. Having now had more than eleven years' extensive experience in the use of peroxide of hydrogen, both as an internal remedy and as an external application, I trust that a few remarks from me on the following passages extracted from your article may not prove unacceptable to your readers. They are as follow:—

"The decomposition and evolution of gaseous oxygen which this substance undergoes in contact with organic matter is well known; but it has been said by Assmuth and Schmidt that this decomposition does not take place in the circulating blood. Both the observers have demonstrated that this is an error, and that it is by this decomposition that the substance exerts the remarkable poisonous influence which it is known to possess.

"If a small quantity—three or four centimetres—of a weak solution of peroxide of hydrogen is injected under the skin of a rabbit, death occurs in a few minutes with all the signs of asphyxia.

"Taken into the stomach, peroxide of hydrogen is capable of producing the same effect, although in slighter degree and with less certainty.

"The circumstance that small doses of peroxide of hydrogen lose all their specific property in the alimentary canal, and that large doses produce these toxic effects, preclude any expectation of good from its internal administration."

So long ago as January 11th, 1868, you did me the honour to insert in your journal a short history of a case of diabetes, which, after having for more than three years resisted all the usual remedies for that disease, including a strict observance of the dietary scale commonly recommended for diabetics, rapidly recovered under the use of etherial solution of peroxide of hydrogen, given in drachm doses mixed with water, three times a day. The patient, a lady now forty-seven years of age, has, by the continued use of the remedy, enjoyed almost perfect immunity from all the distressing symptoms of diabetes, and this in spite of a pretty free use of bread, vegetables, fruit, pastry, and beer. So great is her dread of a return of the disease, and so perfect her faith in the remedy, that she purchases Robbins's etherial solution of peroxide of hydrogen, commonly known as ozonic ether—the form in which I always prescribe it—by the dozen. During the last eleven years this lady must, at a moderate calculation, have swallowed many gallons of this very strong solution of peroxide of hydrogen, and yet it has never produced any toxic effects, but, on the contrary, has acted most beneficially on her system.

It is stated in your journal that "Schwerin found that rabbits seemed to possess an immunity from its prejudicial influence when it was taken into the stomach.... No doubt the immunity of rabbits is due to the decomposition of the whole of the ingested peroxide by the large quantity of vegetable matter which is always found in the rabbit's stomach."

Some years ago I kept a rabbit for three days and nights under a large bell-jar containing an atmosphere highly charged with etherial solution of peroxide of hydrogen without producing any other ill-effect than a pretty smart attack of bronchitis, from which he quickly recovered on being removed from its influence.

My friend Professor Halford, not long ago, injected a drachm and a half of etherial solution of peroxide of hydrogen into the femoral vein of a dog without its doing the slightest injury. I am, therefore, surprised to learn that rabbits can be so readily killed by the subcutaneous injection of very small doses of peroxide of hydrogen.

That peroxide of hydrogen does not act as a poison when administered in moderate doses to human beings I am perfectly satisfied, having both taken it myself and prescribed it largely for my patients, more particularly for those suffering from diabetes, and I cannot call to mind a single instance in which it has acted injuriously.

The reason assigned in your journal for its not poisoning rabbits when administered internally cannot apply to man, simply because the kinds of food that rabbits commonly eat—such as parsley and cabbage—in their raw state rapidly decompose peroxide of hydrogen; whilst when cooked they may remain in contact with it for a very long time, many days, without causing its entire decomposition. I have gained somewhat similar results by experimenting on various articles of food in their cooked and uncooked state. Uncooked milk, for instance, will decompose peroxide of hydrogen very rapidly, whilst milk that has been boiled will not do so for many days. Raw meat instantly decomposes the peroxide, whilst cooked meat will not do so for some hours. I have now before me a cup of strong beef-tea, to which a drachm of ozonic ether was added nearly four days since, and it still liberates the iodine from iodide of potassium very freely. This is the test which, for convenience' sake, I have used in these experiments. A strong infusion of tea seems to possess the power of preserving peroxide of hydrogen from decomposition. I may state that most of the experiments performed with cooked food were at temperatures considerably above that of the human body. I am, Sir, your obedient servant,

Geelong, Australia, Oct. 4th, 1878. JOHN DAY, M.D.

THE DEATH-RATE OF ST. PETERSBURG.

OF the twenty-eight foreign cities from which returns are received by the Registrar-General, the Russian capital stands highest in its rate of mortality. Whilst the notoriously insalubrious cities of Calcutta and Madras have respectively a death-rate of 40 and 43 per 1000, that of St. Petersburg is no less than 48.

Dr. Hastings.—The after-effects of gas-poisoning have not been sufficiently, fully, and clearly made out.

SALICYLIC ACID IN SCARLET FEVER AND DIPHTHERIA.

To the Editor of THE LANCET.

SIR,—It may be interesting to some of the readers of your valuable journal (if not before noticed) to know that in salicylic acid we have one of the most reliable remedies in the treatment of scarlet fever and diphtheria. For the last three years I have used, with unvarying success, the salicylic acid, suspended in mucilage, in both mild and severe cases of scarlet fever, and have seen the throat symptoms and fever rapidly abate, and the patients make rapid recoveries. On being called to a case, I have given doses varying from five to ten grains every two hours until the throat symptoms and fever abated, and find that little patients, for whom we can do so little when obliged to use the mop or brush to the throat, experience no inconvenience in taking this medicine, which, being simply in a state of suspension, has a chance of (at least some portion of it) remaining on the throat, and so acting as a topical remedy, whilst the remainder acts as an invaluable antipyretic. The success in cases of scarlet fever has led me to try the same remedy for diphtheria, and I am happy to say that in the most virulent cases of diphtheria I have seen the pellicle break up, and the diphtheritic patch removed in a most marvellous manner. Indeed since the use of salicylic acid in diphtheria I have not seen one fatal case, although several were of a very dangerous type. It is but fair to say that in diphtheria my mode of action is to give the salicylic acid every four hours, and tincture of perchloride of iron (P.B.) alternately. Some of your readers may say, "But how do you prove that it is the salicylic acid which removes the patch when you use iron also?" My answer is that at first I trusted solely to the salicylic acid, and found in mild cases that it answered every purpose; but that in more severe cases, accompanied with much debility, there seemed to be a tendency to a return of the disease on discontinuing the remedy. I was thus led to use the iron, alternately with the acid, as a blood-restorer. To prove that iron was not the sole active agent in the cure, I can but point to the many failures of iron as a local application in the past treatment of diphtheria; whereas with the salicylic-acid treatment I have not known one single case of the pellicle spreading under its use. I append the form of mixture I use:—Salicylic acid, one or two drachms; gum tragacanth, one ounce; simple syrup, four drachms; tincture of oranges, four drachms; water to six ounces: four drachms to be taken every two hours.

Yours truly,
A. K. POWNALL, L.K.Q.C.P., &c.

Chorlton-cum-Hardy, February, 1879.

Dodo.—The case of an unqualified assistant registering as a "dental surgeon," and declaring himself to be "in practice as a dentist in conjunction with pharmacy," is precisely what must be expected under the Act of last session. It was a grievous and most disastrous error to omit an *express prohibition* of the assumption of the distinctly surgical title "dental surgeon." We are now reaping the fruit of this blunder, and before long the public will begin to feel its effects.

Mr. William Sedgwick's "Notes on Poisoning by Chloral Hydrate" will be published as early as possible.

Dum Spiro Spero should address his inquiries to the examiners or their secretary.

Dr. H. M. Tuckwell, (Oxford.)—Thanks.

REMUNERATION OF HOSPITAL MEDICAL AND SURGICAL STAFFS.

To the Editor of THE LANCET.

SIR,—I should much like to know your opinion and that of others interested in the various hospitals of London on the subject of the remuneration of the medical and surgical staffs attached to them. I believe at our great hospitals the medical men, as a rule, receive an honorarium for their services, and that these appointments are often very lucrative through the students and private practice; but at the various institutions supported by voluntary subscriptions, and without schools, the practice of giving an honorarium for services rendered seems to vary greatly. In many instances I am told no remuneration is given at all. When the hospital is too poor to afford any compensation to their staff, of course it cannot be given; but it does appear to me that all those charities that can afford it ought to give the members of their staff a sufficient honorarium at least to compensate them for loss of time, travelling expenses, &c., say from fifty to one hundred and fifty guineas per annum. On the other hand, I am told the reputation gained by being attached to a hospital is a sufficient reward. That this is not always so I well know, and even if it were it is but a lame argument. For instance, an architect erects a good house or mansion; he obtains reputation and business in consequence, but he, nevertheless, expects to be paid his commission. To be the architect of a public building is enough to start a man to fortune; but he expects to be paid for all that. So it is in business generally. At our hospitals the secretary, chaplain, clerks, &c., are all paid, and properly so. Why, I ask, should the medical man who does the real work (and often very hard and responsible work too) be the only one left out in the cold). If a hospital is favoured by the generous support of the public, it is probable that this success depends to a great extent on the appreciation in which the staff is held, and the medical men are almost invariably the direct means of bringing considerable funds to the institutions. Yours &c.,

London, Feb. 1879. A COMMITTEE MAN.

A Surgeon asks for fuller information from the gentleman who, at the Obstetrical Society a few weeks back, described the operation for dilating the os uteri by the introduction of the forefinger of each hand simultaneously.

Gamma.—We are obliged to our correspondent for his letter.

A CASE IN MEDICAL JURISPRUDENCE.

To the Editor of THE LANCET.

SIR,—The following case has very great interest from a medico-legal point of view. At the inquest the question was asked by the coroner whether the hæmorrhage found at the post-mortem preceded the fall or was caused by it? It is in order to see whether any more satisfactory answer could have been given, and to throw some light on any similar case in the future, that I ask you to allow a place for this in your columns and an expression of your opinion. It is easy to conceive that there might have been some suspicion attaching to a fellow-worker, and the answer to the coroner's question might have had serious results for such a one. In Druitt's Vade-Mecum we are cautioned against attributing to an accident results which were really caused by an attack of apoplexy. The case was as follows.

C. H——, aged forty-five, a carpenter, was brought into hospital last July, the men accompanying him stating that he had fallen a distance of ten feet. He was insensible, pale, with feeble pulse. Over the right parietal eminence was an irregular scalp wound with three flaps, the apices turned towards the centre, which latter had the appearance of a hole accompanied by loss of substance; this did not lead down to bone. On being placed in bed it was found that he had passed urine, the whole of the lower part of his shirt being quite wet. Whilst the wound was being dressed he recovered consciousness sufficiently to ask for some vessel to micturate in. On examination the urine was found to be a clear watery fluid, barely acid, specific gravity 1015, slightly albuminous, the deposit just covering the bottom of the tube. Fehling's solution was rapidly reduced, showing presence of sugar. There was no bleeding from the nose, ears, or subconjunctival hæmorrhage. After the head had been dressed he vomited slightly, but there was no blood in the vomit. Pupils dilated, inactive, and left eye destitute of reflex action; the whole of the left side was paralysed; breathing quiet. At one A.M. he had a fit, which the nurse states was accompanied by jerking of the right limbs, with slight convulsive movements of the left hand; the mouth was drawn to the right side, and both eyes turned to the same side. A second and similar attack followed at 2 A.M. After the first he remained insensible for some hours; the breathing was somewhat noisy, and interrupted at intervals by a catch. At 9 A.M. he was sensible, and able to answer questions. In the afternoon the face became bluish; breathing very rapid. At 8 P.M. rhonchal fremitus was felt and rales heard all over the chest; breathing diaphragmatic; this increased, and he died at 11.45 P.M.

Post-mortem.—Skull only opened. There was no injury whatever to any of the bones, either on the surface or at the base. On the surface of the brain, corresponding in position to the external wound, was a thin layer of effused blood, about the size of the palm of the hand. On opening the lateral ventricles, the right was found full of blood-clots and red-stained fluid; the brain-substance was torn down and ragged, and a cavity the size of an egg was hollowed out. The septum lucidum was torn, and a certain amount of effusion had taken place into the left ventricle, but it merely covered the floor of the cavity, and had not injured the brain-substance. The internal carotid and basilar arteries seemed healthy, but the smaller branches were atheromatous.

The previous history of the man disclosed the facts that he had been in better circumstances, and his reduced state had worried him much; that he had been suffering from diabetes for three or four years. He never had any fits, and bore a good character for sobriety.

At the inquest the evidence given was that the deceased had been working in a room the floor of which was not floored, but consisted of open rafters. An opening fourteen inches by two feet nine inches communicated with the room below, the floor of which was paved with bricks, the height being exactly eight feet. He was working with another man, who had just left him, when the noise of a heavy body falling attracted attention, and the deceased was found on the brick floor, with a scalp wound and frothing at the mouth.

The answer given to the coroner's question was that there was nothing in the post-mortem appearances which would warrant me in expressing any opinion as to whether the hæmorrhage preceded and caused the fall, or was due to the latter; but that after the above evidence I was inclined to the former hypothesis. Was this sound? Could a more definite answer have been given? Yours obediently,

February, 1879. AN EX-HOUSE-SURGEON.

*** The right solution is certainly a matter of doubt; but the probability seems to us to be in favour of an apoplectic fit having preceded the fall. It is not often that ventricular hæmorrhage results from a blow.—ED. L.

RUPTURE OF THE BLADDER.

To the Editor of THE LANCET.

SIR,—Had my remarks at the meeting of the Medical and Chirurgical Society, after the reading of Mr. Heath's paper on the "Diagnosis and Treatment of Ruptured Bladder," referred to cases met with in my own practice, I should not have asked your kindness to correct a mistake which has been made in your report of them. In Dr. Macdougall's second case, where the aspirator was used as well as catheterism, it was urine, and not "blood," as I am made to say, which was drawn by aspiration from the abdomen, proving not only that this was an undoubted example of recovery after rupture into the peritoneal cavity, but also that there had been neither call for laparotomy nor for a direct opening into the bladder by the perineum.

Dr. Macdougall's two cases will be found in his paper on "Rupture of the Urinary Bladder and its Surgical Treatment," contributed to the *Edinburgh Medical Journal* in January, 1877. I would commend this paper to the perusal of every surgeon; for it is, I think, masterly, suggestive, and complete. Your obedient servant,

New Cavendish-street, March 6th, 1879. HERBERT W. PAGE